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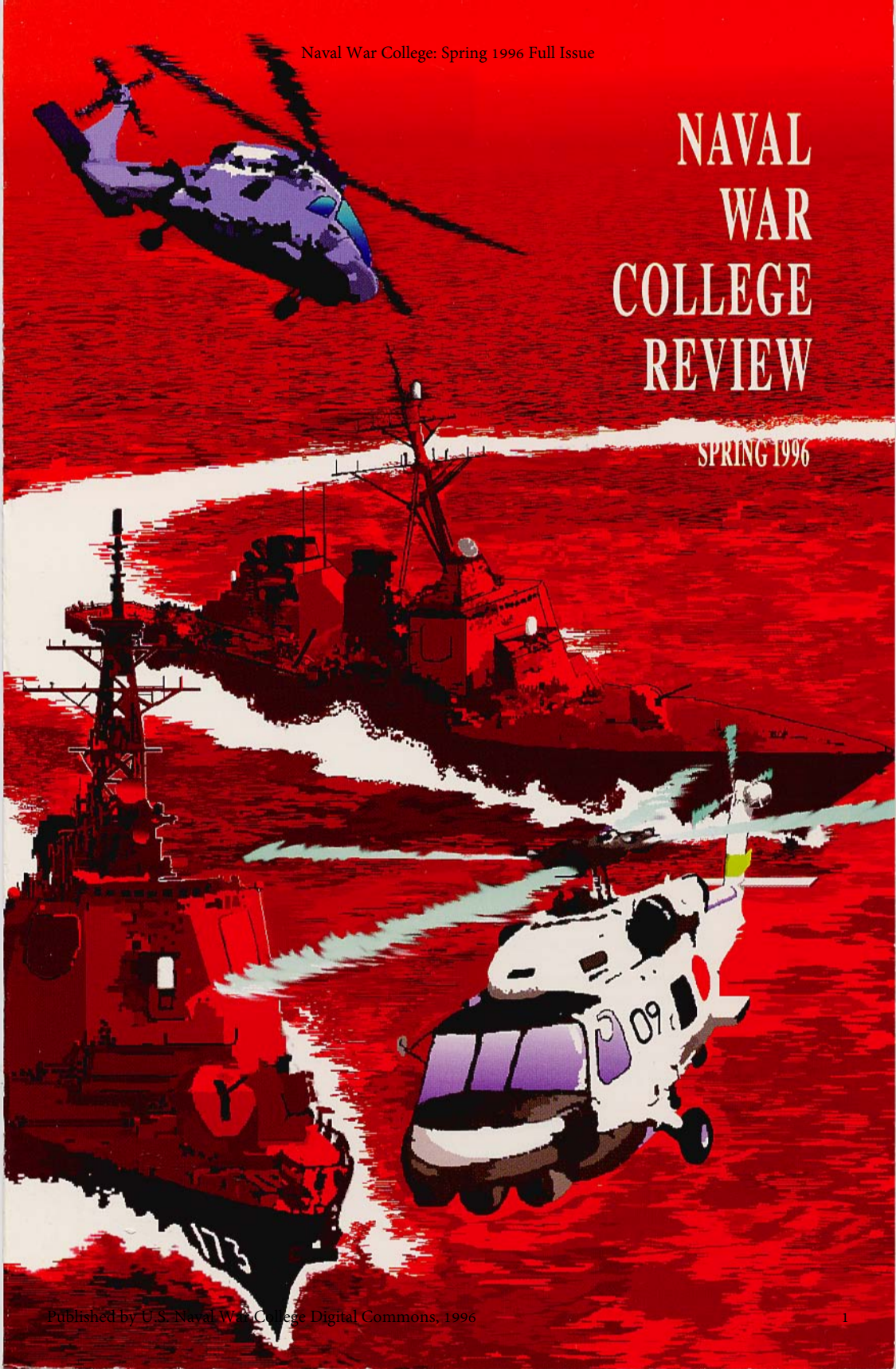

NAVAL WAR COLLEGE REVIEW

SPRING 1996

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Our Cover: The Japanese Maritime Self-Defense Force destroyer *Kongo* and a U.S. Navy *Arleigh Burke*–class destroyer, both Aegis-equipped, operate with SH-60 helicopters. Bob E. Hobbs, of the Naval War College Graphics Arts Department, assembled and produced this impressionist rendering from several photographs using Corel Photo-Paint 5 software. For an assessment of the evolution of JMSDF roles, see the article by Professor Peter J. and Commander Mark S. Woolley beginning on page 59.

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"A true learned journal can be an important source of information for those who have heavy demands on their time. From my experience, such a journal is no better than its reviews; and institutions are no better than their journals."

Hyman G. Rickover

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"While ethical decisions may not always be easy, the choices and standards are clear. It is up to each of us to meet those standards—our nation deserves no less."

President's Notes

To be persuasive, we must be believable;
To be believable, we must be credible;
To be credible, we must be truthful.

Edward R. Murrow

EACH YEAR THE NAVAL WAR COLLEGE sponsors a Professional Ethics Conference for our students. In the past we have taken as our theme such topics as "The Ethics of International Intervention" and "Ethics Revisited: The Individual and the Organization." This year we took a slightly different tack and explored the subject of "Personal Ethics and the Military Service: The

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Rear Admiral Stark was commissioned in 1965 at the U.S. Naval Academy, studied at the University of Vienna as a Fulbright Scholar, and earned a doctorate in political science at The Fletcher School of Law and Diplomacy, Tufts University. He has served on the Navy Staff, the National Security Council staff, and as Executive Director of the Chief of Naval Operations Executive Panel. His sea service has included command of USS *Julius A. Furer* (FFG 6), USS *Leahy* (CG 16), and, from 1994 to 1995, the Nato Standing Naval Force Atlantic, deployed in the Adriatic Sea. He assumed the duties of President of the Naval War College in June 1995.

Character of Readiness." The symposium was not intended simply to lecture people on a code of ethical behavior or why it is important in leadership. Each student present is already a leader—all are already members of a profession which prizes ethical, honorable behavior above all else. Instead, we challenged our participants to consider not only their personal ethics but also their ethical responsibilities as military leaders and the relationship of ethics to the whole range of issues encompassed within the term "readiness." Based on the events of the past few weeks and the quick response times required in military actions around the world today, "readiness" is a topic which is both timely and important.

Questions such as "What is readiness?" or "How do we measure true readiness?" appear with increasing regularity in the press as well as scholarly publications, as part of the national reevaluation of the role of the military in the post–cold war world. Simultaneously, we have entered a period of national belt-tightening, in which requirements for budget cutting are matched by action, and funding for every program is sharply reviewed and questioned. More than ever, Congress and the public demand—rightly—that the significant national treasure and talent devoted to America's military forces must result in real "readiness."

We are the stewards of the critical national resources which the services currently possess; we are the planners of our military resources for the future. In dealing with readiness issues, we must never forget that our standards of professional ethics are the foundation for the trust and confidence of those we lead. We must never allow ethical principles to be sacrificed for the sake of expediency. We all know what these principles should be—the highest standards of personal and professional integrity. Yet we also know that from time to time members of our profession do not measure up to these standards.

At some point in their careers, most officers are confronted by situations which present ethical dilemmas and seem to require balancing personal standards of integrity against the perceived (as opposed to the stated) expectations of our service. A recruiter may be tempted to bring in marginally qualified personnel to meet his quotas. An operations officer may opt for larger numbers of less demanding exercises to inflate his training statistics. A commanding officer may wish to delay reporting a materiel problem to avoid the appearance of his ship or squadron being less than fully ready. Each of these is an example of the need to choose "the hard right over the easy wrong."

The success of our mission to defend the nation depends on how we, as professionals, make these decisions and exercise our duties and responsibilities. Our success is inextricably linked to how the armed forces are perceived by the public we are sworn to serve. We currently enjoy an unusual degree of public trust, earned by our hard work and that of our predecessors. As the Secretary of

the Navy stated in one of our Conference readings, "Our role in setting and adhering to the highest ethical standards for ourselves and our services plays a crucial role in ensuring this continued trust and the continuing success of our mission."

Readiness is a key issue which tests our entitlement to this public trust. Few issues are more closely related to national security and the lives and safety of those we lead and protect. Readiness has a nasty habit of being tested by the real world, which is no respecter of manipulated statistics, disingenuous definitions, self-justifications, or expedient shortcuts. While ethical decisions may not always be easy, the choices and standards are clear. It is up to each of us to meet those standards—our nation deserves no less.

J.R. STARK
Rear Admiral, U.S. Navy
President, Naval War College

The Changing Nature of Warfare?

Colin S. Gray

IF THIS WERE A SERMON, I would take as my text these remarkably accurate words of Alfred Thayer Mahan: "From time to time the superstructure of tactics has to be altered or wholly torn down; but the old foundations of strategy so far remain, as though laid upon a rock."[1]

My mission here is to invite a dialogue on the subject of what is changing, and what is not changing, in warfare. My perspective is both hierarchial and holistic. By this I mean that on the one hand I must look at the hierarchy descending from vision down through policy to grand strategy, to military strategy, to operational art, and ultimately to tactics. On the other hand, I must be alert to the implications of the fact that this hierarchy is in practice a two-way street: change at the tactical level, say, can thwart operational or strategic designs. In addition, the technological and logistical factors that condition tactical feasibility or infeasibility thereby have the potential to set the practical bounds for policy, strategy, and the operational level of war.

In this paper I address the hypothesis that the very nature of war is changing—or, less expansively, that its character is changing—and I do so by considering the argument that a revolution in military affairs based on an ability to acquire, process, disseminate, and then use information at an unprecedentedly rapid rate is underway today. After examining assumptions and offering some appropriate caveats, I will consider the arguments for this putative revolution by analysing what will change and what will not change in statecraft and conflict. If my tone is skeptical, that skepticism does not indicate disbelief in the probability of cumulatively radical change. Instead, it signifies reservations about some of the more extensive claims for information-age warfare. I will argue that

Dr. Gray, a member of the *Naval War College Review* Advisory Board, is a professor of international politics and the Director of the Centre for Security Studies at the University of Hull, England, and also the European Director of the National Institute for Public Policy. His latest book is *Explorations in Strategy* (Westport, Conn.: Greenwood, 1996).

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although the banner carriers for a revolution in warfare—which is to say, today, for information warfare—are correct in some essentials, their revolutionary cause will not overturn longstanding conditions of American strategic culture. Furthermore, I argue that although a genuine revolution is underway in the methods and some of the means of (information-led) warfare as it could be conducted by the United States, achievement of a true revolution in strategic effectiveness is not probable. I will suggest that potentially revolutionary advances in the art of war tend to prove self-defeating, inasmuch as foes, actual or would-be, adapt to menaces to their own strategic effectiveness.

The nature of warfare does not change, any more than does that of the human beings who lie behind it. What is war? It is, and always has been, organized violence conducted for political ends; the adjective *political* is critical, because it distinguishes war from crime. It is difficult to improve upon Karl von Clausewitz's characterization: "War is thus an act of force to compel our enemy to do our will."[2] From Periclean Athens, to Republican and Imperial Rome, to the lethal quarrels of medieval Christian Europe, to the conflicts of modern times, war and strategy have not changed their natures. There is a core concept—organized force for political ends—that unites wars of all kinds in all periods. Wars in all eras have more in common with each other than they do with other activities of their respective times.

If warfare, however, has a constant nature, it has a continually changing *character*, always producing new forms. To understand the nature of warfare we can do no better than examine two admittedly flawed masterpieces: that attributed to Sun Tzu and, of course, that written by Clausewitz. Among other problems, both works suffer from a severe shortage of salt water; neither has a maritime dimension. Also, Sun Tzu's *Art of War* is more a study of statecraft than of war, while *On War* contains too much about war and not enough about statecraft. Nonetheless, as texts on, respectively, the theory of statecraft and the theory of war, these works have no close competitors.[3]

The Military Revolution Hypothesis

In his recent book, *High Seas: The Naval Passage to an Uncharted World*, Admiral William A. Owens, U.S. Navy, is correct to emphasize how important it is "to inculcate the idea that change is a constant. Uncharted passage is the environment of the future."[4] Admiral Owens argues, again most sensibly, that "we must be aware that we walk a narrow path between the dangers of mindless adherence to outmoded concepts and fashionable acceptance of change for the sake of changing."[5] Amen; but here only beginneth the lesson.

For several years in the mid-1980s it seemed as if conferences held by the extended U.S. defense community could only be on the subject of President

Ronald Reagan's SDI, the Strategic Defense Initiative. We tramped from conference site to conference site, meeting the same friends and opponents, debating the same unanswerable questions: Will your as-yet-unbuilt countermeasures defeat our as-yet-unbuilt ballistic missile defense architecture? Ten years on, the new fashionable topic is "I-war," information warfare, or—with uncommon restraint—the hypothesis that a revolution in military affairs is underway.[6] In fact, in a survey of defense technology *The Economist* offered the thought that "information-war studies are proliferating within the American armed forces almost as quickly as the networks that carry them from desktop to desktop."[7]

What do we mean by a revolution in military affairs? Here is a rather long-winded but nonetheless enlightening definition: "It is what occurs when the application of new technologies into a significant number of military systems

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". . . [Although] the banner carriers for a revolution in warfare . . . are correct in some essentials, their revolutionary cause will not overturn longstanding conditions of American strategic culture."

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combines with innovative operational concepts and organizational adaptation in a way that *fundamentally alters the character and conduct of a conflict.* It does so by producing a dramatic increase—often an order of magnitude or greater—in the combat potential and military effectiveness of armed forces."[8]

There is an obvious sense in which "information," perhaps even "information warfare," must be an element or subset of war more generally. There is no authoritative definition either of "revolutions in military affairs" (or RMAs) in general, or of the alleged contemporary one in particular. It is certainly true that Soviet, later Russian, military authorities have for more than a decade tied the hypothesis of such a revolution to what they have called "reconnaissance strike complexes."[9] For the purposes of this paper, however, unless otherwise specified, the current debate over a revolution in military affairs will be associated with information warfare. The subject of information is the thread common to virtually all writers on the putative RMA. *The Economist* is probably right to claim that "information warfare has as many meanings as it has proponents, detractors, and observers";[10] but if the frontiers of our subject may be uncertain, the identity of the core, *information*, is not in doubt.

(Lest any of my remarks should mislead, I am essentially friendly to this hypothesis. In fact, for some years I have been seeking to persuade U.S. military organizations, including the Navy, that they have been slow in exploiting the military potential of space systems in particular.)[11]

The problem is not so much to understand what is going on as to pass judgment on what it means, while being tolerant of error in detailed predictions. Our "third-wave," information-age warfare theorists have discovered the obvious. Much as Mahan "discovered" sea power, so commentators today are discovering the information age and, inevitably, information-age warfare. Just as Mahan was wont to exaggerate the novelty of his brainchild, so today's analysts may be overimpressed with the originality of theirs. One commentator could claim of Desert Storm that "it was the first information war"—a thought that, one could argue, betrays a lack of appreciation of the teachings of Sun Tzu, who emphasized the acquisition, denial, and manipulation of intelligence information.[12]

What are the merits and demerits of the hypothesis that there is a military revolution arising from the military effectiveness of new information technologies? Sixteen years ago, Michael Howard wrote a penetrating article on what he called "the forgotten dimensions of strategy," one of them the social dimension.[13] In its light, the current American debate about information-age warfare seems unduly narrow in its concern with the technology of war; in fact, war is both a political phenomenon and a social institution. It is waged by societies in ways appropriate to them, and it is waged within the distinctly uncivil "society" of states. Hence, any discussion of the changing character (as opposed to the static *nature*) of warfare has to treat or at least be aware of trends: in warfare itself (what Clausewitz referred to as the "grammar" of war);[14] in the societies that prepare for, and might wage, war; and in security relations within the now fully global community of polities and would-be polities. These three "baskets" of trends interact, sometimes, one suspects, in ways unrecognized by commentators. It is healthy to ask oneself, "How do my ideas about the changing character of warfare, the strategic culture of American society, and probable challenges from the world beyond the borders of the United States all interact?" Many of us would be surprised to find that assumptions, even preferences, in one area have shaped judgments in others.

For example, a process of rigorous self-interrogation may well reveal that expectations that the U.S. is able to conduct information-age warfare are reinforced by a belief that the United States will not see a threat to its survival, or even its vital interests, over the next decade. What other assumptions are there, and how vulnerable are our conclusions to the correctness of those assumptions?[15] Does information-age warfare characteristically involve low "friendly" casualties? Or should we take heed of the lesson of air warfare in this regard?[16] Is American society in the 1990s, with its low fertility rates, willing to accept casualties?[17] Or is that an absurd question to pose *in vacuo*? (It is true that a machine-rich American culture has looked sensibly to maximize the roles of vehicles, steel, and explosives in lieu of human flesh whenever appropriate—and

sometimes beyond that point. But it is also true, contrary to popular mythology, that when the stakes are very high, as in the Civil War and the two world wars, the United States has no tradition of being especially sparing of American lives.) And in terms of the international setting, how is world politics evolving? Are the future security challenges to the United States likely to shape strategic environments favorable to U.S. excellence in "third-wave" "I-war"?[18]

I am suspicious of the validity of trends argued for with scant reference to possible countervailing factors, historical discontinuities, or unusually permissive contexts. Rather like the brief period of the U.S. atomic bomb monopoly, information-age warfare is wonderful if only you can wage it, and against an enemy unable to impose on the conflict a character that negates your advantages. Before offering some caveats on information-age warfare, then, I will offer, as hostages to fortune, two challenges to what now seem orthodox beliefs.

One of them is Edward N. Luttwak's thesis that small causes require risking only small means.[19] Anyone advancing the cause of "I-war" on that basis is vulnerable to error on several counts. First, the United States is not the Roman Empire. It is rather a great popular democracy that, even more than twenty years after its Vietnam trauma, has difficulty bringing itself to apply force at all, however limited the goal and modest the means. Information-age warfare is not really a technical fix to the "problem" of how to mobilize U.S. political response

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to a challenge that does not threaten American vital interests. American political culture will not necessarily lower its threshold for the resort to force just because the contingency has an "I-war" character, with few Americans at risk. Furthermore, it is plausible to argue that world politics today is at a way-station in the familiar war-peace cycle of great balance-of-power struggles. To look out on the world of the mid-1990s is to see exactly and only that, the world of the mid-1990s. The intensity of risk to American interests today is no more reliably indicative of the future than was the situation in, say, 1926.

Secondly, I respect, indeed am tempted to indulge, but am not persuaded by, the somewhat optimistic conclusions Admiral Owens offers: "We ought to consider a vision of a better tomorrow not because the future it portrays is certain, but because we can make that future more likely if we try to do so."[20] He should be correct. Also, his specific advice, that the United States should both be alert to the perils of the present security dilemma *and* build forces that are unchallengeable, is as attractive as it is probably contradictory.[21] I find it difficult to conclude

otherwise than that the Admiral, denying the power of a historical experience that he understands very well, has succumbed to the appeal of hope.

Thinking about the future of warfare, whatever the fashionable belief happens to be, involves at least three different but related clusters of trends: the technical ones, concerning the military instrument itself; those pertaining to domestic society and politics; and those characterizing the changing international environment.[22] These three "trend streams" work interdependently. Societies with similar levels of technical achievement respond to security challenges in distinctive ways, as a function of their political, strategic, and even service cultures.[23] Historical experience suggests also that a recent victory tends to discourage effective adaptation to new problems and conditions. Furthermore, in the present case, we must ask, though the trends in military and civilian commercial technology are plain enough to see and even if government and society are willing to adapt to their implications, do the security challenges lend themselves to the preferred U.S. military style, combat using the state of the art?

Thus far I have focused upon what can fairly be termed the mainstream of debate about a possible revolution in military affairs, of which information acquisition and denial constitute the center of gravity. While remaining soldiers, sailors, and aviators, members of the armed services are being encouraged to think of themselves as "information warriors." We are advised that "information dominance" should be the leading edge of U.S. advantage in future conflict—a concept obviously from the same stable as command (or control) of the sea, command of the air, and the like.[24]

However, there is also a group of theorists who would have us believe that the principal contemporary revolution in warfare has nothing essentially to do with access to, or the exploitation of, information. Instead, so we are told, "low-intensity conflict" is the wave of the future.[25] While the U.S. armed forces are investing in the ability to make a better job of waging Desert Storm, it is alleged, the locomotive of history is passing them by.[26] This view does not deny that information excellence is important, indeed critical, but it suggests that the "reconnaissance-strike" centerpiece of "I-war" thinking may have only a distinctly adjunct role to play in most contexts of deeply political, low-intensity conflict.

In a sense, the logic of this prediction of a new significance for low-intensity conflict is not structurally dissimilar from that behind claims for information warfare: that because societies wage war according to their several characters (including cultures), an electronically interconnected, information-oriented society will inevitably prepare for, and wage, information warfare. The U.S. armed forces may lag behind the more advanced corporations in their adaptation to the information age, but still the trend is unmistakable. A parallel logic

underlies the case for a new prominence for low-intensity conflict. Such conflict is deemed the inevitable consequence of a decline in the authority, legitimacy, and power of the traditional nation-state. Such theorists as the Israeli military historian Martin van Creveld have speculated to the effect that Clausewitzian "trinitarian" warfare—involving the people, commander and army, and government—has had its day.[27] It has become fashionable among academics to discount the nation-state, to discern complex interdependencies among societies, and generally to portray governments as increasingly impotent in the face of global financial, environmental, and cultural movements and influences.[28]

Although there is something to be said for the low-intensity-warfare school of thought, its development to date seems to me to betray a readiness to be over-impressed by recent trends in civil disturbance (the Intifada against Israel, for one example). As with information warfare, so for low-intensity conflict: I find more to the case than some critics will allow but rather less than the more excited prophets proclaim.[29]

I referred earlier to my belief that the U.S. military establishment has been slow to come to terms with the meaning of space systems and the requirements of space warfare. An even stronger case can be made that American political and military culture has persistently resisted effective strategic use of special operations forces. From the time of Rogers' Rangers in the French and Indian Wars, it has been almost all downhill. If low-intensity conflict is the wave of the future, or even if it is only one among several significant waves of the future, then the U.S. defense community needs to take a hard and honest look at how it uses, supports, and typically regards its "special warriors." Notwithstanding improved understanding in the United States of special warfare in the 1980s, the less than happy experience of U.S. special operations forces in the Persian Gulf in 1991 makes the point that this is a continuing problem.[30]

Information Warfare: Some Caveats

"Information is the central resource of the third-wave economy. It is the oil of the future," so Alvin Toffler tells us.[31] Another strong advocate advises that "the information age has altered the whole nature of time and space and distance. Weapons can be launched from any place on the globe, in the air or on the sea. The information will flow over electronic means. The commander can sense the battlefield regardless of where he's located."[32] All of that is well and good, provided the weapons launched from "any place on the globe" are ours. It is time to mention a few caveats on the subject of this latest emerging revolution in military affairs.

First, as Rear Admiral J.C. Wylie wrote, "planning for certitude is the greatest of all military mistakes."[33] What if America's enemies in the future decline to

wage war according to American preferred rules? War, in common with sport, has the characteristic that what worked yesterday may not work tomorrow, precisely because it worked yesterday.[34] Nothing tends to fail like success, or the attempt to repeat success by unreformed methods. I hesitate to state this first caveat, because it is so obvious—the idea of an uncooperative foe—but history shows that the making of false assumptions about the enemy is a hardy, perennial problem. Although America's information warriors should excel in all kinds of warfare, are there varieties of conflict wherein prowess in "I-war" would be at a serious discount? If an uncooperative and old-fashioned thug refused to set himself up for a modern version of Desert Storm, Trafalgar, or the "Marianas Turkey Shoot" but elected instead to (dare one say it?) "go nuclear," what then? Just how proficient will third-wave warriors and their equipment be in the face of nuclear peril?[35] I cite nuclear menace as an example of a strategic knight's move that could deny the U.S. armed forces effectiveness they should otherwise expect. There may be other forms of war, including low-intensity conflict, that would blunt the cutting edge of state-of-the-art, information-age forces.

Second, by way of sharp contrast with most, though not all, previous candidate revolutions in warfare in modern times, information warfare draws heavily upon commercial electronic competence.[36] The military establishment is exploiting basic technologies that are almost globally available and already have found pervasive commercial application; there are not many significant secrets in this area. I am not as pessimistic as are some theorists about the future of *relative* U.S. military prowess, but I would register the thought that there are no scientific, technical, or economic reasons why the United States inevitably will secure, exploit, and maintain a significant lead in capabilities for information warfare. In fact, the huge sunk costs in the capital stock of the existing U.S. force posture could militate against properly innovative and adaptive military behavior. As was true for Britain's Royal Navy from 1815 to 1914, when one is already clearly number one, technical revolutions can be unwelcome.

"War, in common with sport, has the characteristic that what worked yesterday may not work tomorrow, precisely because it worked yesterday. Nothing tends to fail like success. . . ."

Third, new capabilities inexorably bring new vulnerabilities. When their pocket calculator breaks down, some school children do not know how to add. Radio is wonderful, except that the enemy has it too, and if you are careless or unlucky he can listen to your message traffic. Remember ULTRA and MAGIC? One-sided information warfare, as in the Gulf in 1991, has a great deal to recommend it. But what if America's next foe either contests seriously for

information dominance or invests intelligently in such "low-technology" solutions as old-fashioned military virtues or the "I-war" equivalents of a second-class naval power's traditional weapons—the mine, sunken obstacle, and torpedo? An opponent who enjoys noteworthy advantages—say, familiarity with terrain, or relative political enthusiasm—need not seek information dominance to be strategically competitive. Rather, all that opponent may need to do is deny U.S. forces the ability to achieve and exploit such dominance. By analogy with naval warfare, the goal is information denial, not information control.

Fourth, although information excellence has a pervasiveness unusual in the history of military revolutions (which have typically been geographically or functionally specialized, with expression in particular platforms or firearms and therefore limited in domain), still it is well to remember that different strategic problems require attention by different mixes of military means and methods. ULTRA operational intelligence was a vital enabling agent in the defeat of Admiral Karl Dönitz's U-boat campaign, but ULTRA itself sank nothing. To quote Admiral Wylie again, this time with a continental flavor: "The ultimate determinant in war is the man on the scene with the gun."[37] Typically, this is why sea power and air power tend to play enabling, rather than concluding executive, roles in warfare; the human being is a land animal. My point is that military revolutions, no matter how startling, tend to overlay older practices and capabilities rather than replace them entirely, let alone immediately. In part this is because it takes time for a military establishment to learn how to exploit new military means, but it is also because a variety of strategic challenges requires a variety of responses.

Fifth, it is a cliché but nonetheless true and important to state that change (though not the rate of change) is constant. It is also true, though less of a cliché, to argue that change is frequently nonlinear.[38] In other words, you cannot predict reliably some significant characteristic of the world ten years hence by extrapolating from today through a "surprise-free" future. 2006 may not be "like" 1996 only more so. The problem is to understand discontinuities, nonlinearities if you will. Can one predict the political equivalent of the change of water into steam? In every military revolution there lurks a countervailing, offsetting, revolution. During the great SDI discussions of the 1980s we debated solemnly the possibility of effecting a "defensive transition," as if that would have been the last move in superpower strategic competition. In practice, had we proceeded with such a "transition," the attempt would have been pregnant with the promise of an "*offensive* transition." Likewise, the technologies critical to information warfare that are so promising today will not yield an enduring advantage; still less will they yield an enduring advantage to one country or coalition.

My final caveat is to beware of argument by dubious historical analogy—including mine! There is a great deal of bold interpretation in the still emerging

literature on military revolutions. Strategic effectiveness can flow from many sources, and its history shows some odd synergisms. There is everything to be said for historical study, but the course and outcome of war is a topic at least as complex as the causes of war, and in fact as open to heroic reinterpretation and misinterpretation by the bold or unscrupulous theorist.

What Will Change?

Casting caution to the wind, I am going to argue that what will change in our strategic universe should prove of much less importance than those features that will not alter significantly. I must hasten to admit, however, that even necessary or advisable changes can come with some lethal possibilities. I do not wish to appear to suggest, by analogy, that a person can be overwhelmingly healthy except for a small problem with his heart.

Adaptive behavior in the face of possible revolution needs to be thoroughgoing. The several mechanization sub-revolutions that occupied the 1920s, 1930s, and 1940s, for example, showed all too clearly that new technologies, even new weapons, do not amount to a military revolution. At least until enemies discover countermeasures (as they surely will, given time and experience), the revolution in effectiveness derives, as already suggested, from large numbers of new weapons, fit by suitable doctrine into appropriate organizations for combined exploitation. The information revolution is highly unusual in that its electronic character lacks a dominant-weapon or platform focus. This revolution should enhance the lethality of all forms of (U.S.) military power in most contexts. Better and more timely information more promptly utilized will enhance the fighting power of all of America's military forces, in circumstances where there are clear enemies to be located and struck. Paradoxically, perhaps, that very ubiquity of utility renders adaptation unusually difficult to define. It may be true that the prototypical third-wave weapon system is a stand-off precision-strike vehicle, but even that plausible proposition would miss so much of the value of information-led forces as to be unhelpfully simplistic.

What will change with the information-age way of warfare is that, *in principle*, virtually all military activities could be conducted more efficiently than at present. The qualifier is necessary because Clausewitz's "friction," and enemies motivated and able to harass, thwart, and evade, are certain to degrade nominal military effectiveness.[39] Whether or not U.S. and other countries' armed forces will actually function in war in an environment that is rich in information (and targets) is a question that cannot be answered in the abstract. Geographical and political constraints may diminish the strategic effectiveness that superior forces should be able to generate.

I am not much impressed with the prospects that new information technologies will produce radical changes in the character of warfare or in the net effectiveness of our armed forces. When machine guns are pitted against spears the outcome is not in doubt (unless the gunners run out of ammunition long before they run out of targets, or they panic). But when machine guns, magazine rifles, and quick-firing artillery are pitted against like instruments of violence, then stalemate sets in, pending resolution or alleviation of the new tactical dilemma. The moral of this story is to pick one's enemies carefully.

By this stage in my analysis it should be apparent that although I endorse the proposition that the character and conduct of some kinds of warfare—at least as they could be waged by the United States—are changing in a revolutionary manner, I am less convinced that *net* strategic effectiveness is being revolutionized. For some of the reasons just cited, changes in military technology and methods generate dramatic increases in combat potential and military effectiveness, but only against backward foes and only for a while; they soon generate countervailing, adaptive modernization by less backward foes. If readers conclude, then, that little of essence, as contrasted with means and methods, will change, they will be entirely correct. Indeed, a revolution in military affairs is underway, just as it was in the 1930s. Furthermore, that revolution can deliver radical improvements in strategic effectiveness over what was achieved in the recent past. (Compare combat in Poland and France in 1939 and 1940 with the Western Front of 1914–1918.) But the "revolution" offers "fool's gold": inevitably it catalyzes offsetting means and methods of war.

What Will Not Change?

Because the hypothesis of a revolution in military affairs is so familiar today, it is important to underscore the relatively unchanging context, or contexts, within which it will occur. Here are terse summaries of the primary relevant conditions that will endure.

Human nature is not changing. Both as problem and as solution, the human dimension of warfare persists, effectively unaltered. The ways of peace can neither be induced chemically nor inculcated socially, so many are the paths to conflict.

International politics is not changing on a systemic level. Economic conflict is not replacing old-fashioned geopolitical conflict. Bad times always return in international security affairs, and every international order requires armed guardianship against thugs, rogues, and other would-be predators. I admit to some discomfort with this argument, in that it may appear to be more a statement of pessimistic faith than a considered position suitably vulnerable to changing

conditions. This is not the occasion to argue the point, but much remains to be said on the subject of how economic and political competition interact.[40]

The nature and functions of war are not changing. As noted at the beginning of this article, war remains what it always has been, an act of force or organized violence exerted to achieve political leverage. The precise motives and the tactical means of war certainly have altered over the centuries, but not the nature or functions of the institution.

Technological, tactical, and organizational change in military affairs is all but permanent. Unfortunately, prophesying a "last move" in military prowess is also all but permanent. This is not to endorse indifference towards change; strategic history is replete with cases of countries caught with genuine technical, tactical, organizational, or even operational shortfalls leading to catastrophic defeat. Consider the Prussian trauma at Jena-Auerstadt in 1806, and the French experience in 1940.

The need for *good judgment in policy and strategy* is permanent, even if poor leaders sometimes can be saved by excellent, or lucky, subordinates. What the United States needs today is not so much a sound approach to information-age warfare but a higher quality in policy and strategy making and implementation. So alert is the U.S. defense community to the challenges of an information RMA (with no obvious rival to aim at) that more likely than not it would muddle through such a test well enough. Any disastrous failure in U.S. guardianship of international order will more probably flow from incompetence in high policy and strategy than, for example, from U.S. Navy underinvestment in stealthy ships or vertical launch tubes.

Information-age warfare is ubiquitous, yet *the four geographically defined forms of warfare remain distinctive.* We may all be "information warriors," but war is technologically, tactically, and operationally different on land, at sea, in the air, and in space. New technology can reduce the limitations upon effectiveness unique to these environments, but it cannot eliminate them. "I-war" does not so homogenize combat as to render obsolete the traditional distinctions among the different regimes.

Proficiency in *joint warfare* remains key to high strategic effectiveness, but the basis of that proficiency is superior performance in each geographical environment. The Navy is a team player, contributing to overall strategic effectiveness. For the Navy to contribute effectively in the joint arena, however, it has first to win what needs to be won *at sea.* In other words, a navy has to be excellent *as a navy* before it is at liberty to support, indeed to enable, broader maritime strategy.

The *long-familiar hierarchy* from vision through policy, to grand strategy, military strategy, operations, and tactics *retains its authority* even as information-age warfare emerges. A United States functioning on the world stage in the information age

of warfare can be undone strategically by poor performance at other levels. The U.S. armed forces may be marvelously information-rich, but will they be employed wisely at the right time for the right reason? And can they get ordnance on target once they are?

Strategic effectiveness is built upon tactical effectiveness. Ultimately, even if policy is wise, strategy is sound, and weapon systems are technically world-class, effectiveness flows from what is achieved by the "point of the spear." What is the "fighting power" generated by armed Americans? If international order is to be protected against thugs and rogues, someone has to be ready actually to *do* that protecting, to be that point of the spear. For all the theorizing about a new revolution in military affairs, the real test of adequacy is tactical excellence (competence, at least), in adequate strength.

The information revolution in warfare *has no strong implications for the dollar cost* of defense. No argument presently dominates the debate over the proper level of defense investment. Information-age forces should be able to accomplish greater results for less total effort, but the cost of innovation and the permanent significance of mass as a principle of war mean that no great new-technology dividend should be anticipated—at least for so long as the United States nominally accepts the role of principal global guardian (or international sheriff). Precision can substitute for mass, but such weapons are vastly more expensive than were their "iron" predecessors. Also, an information-age U.S. military establishment is obliged to assume that it must be prepared to fight a foe of like sophistication in the future. Late-model weaponry and support services tend to be more expensive than their predecessors, both in direct comparison and in the context of net assessment against a "late-model" enemy.

Stimuli to Debate

What, then, should be kept in mind as we proceed in this revolution in military affairs? First, the "big things" need to be right. Assumptions must be examined, as must possible vulnerabilities should those assumptions prove unsound. Second, given the uncertainty of the future, there should be suitable, which is to say flexible, safeguards against dangerous surprise effects. Third, the United States, as a continental-scale power an ocean or more away from the more probable and challenging loci of major security problems, need not be apologetic about adopting a broadly maritime strategy. Fourth, and in similar vein, the subject of the future of warfare should not be approached in isolation. Aside from the "grammar" of the apparent revolution in warfare—*après* Clausewitz—there is also the political and strategic culture of the United States. For example, Edward Luttwak's notion of post-heroic warfare (the idea of combat conducted in a most measured way for modest benefits) should be

discounted: not because it is unsuitable in some abstract sense but rather because it is probably inappropriate for Americans—it fails the culture test.[41]

Finally, the proposition that this information age is stimulating yet another historical revolution in warfare is both right and wrong. It is right in that the ability to sense, transmit, and process data has radically overshadowed all historical precedents. There is a valid sense in which American service people today can be called "information warriors." So much is not really in doubt. The question is, what does this mean? Is information warfare some magic wand that reliably produces victory? On balance, and somewhat tentatively, it seems to me that this latest revolution in military affairs will enable the United States to score easy victories against hapless foes but that overall and in the longer run, "third-wave" warfare will prove to be a game that many can play.

I will leave with a thought from Professor Donald Kagan of Yale University, the leading modern historian of the Peloponnesian War. On the basis of an extensive cross-historical and cross-cultural study on the preservation of peace, Kagan concludes: "What seems to work best, even though imperfectly, is the possession by those states who wish to preserve the peace of the preponderant power and of the will to accept the burdens and responsibilities required to achieve that purpose."[42]

Notes

1. Alfred Thayer Mahan, *The Influence of Sea Power upon History, 1660–1783* (Boston: Little, Brown, 1890), p. 88.

2. Karl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton Univ. Press, 1976; first pub. 1832), p. 75. (Emphasis original.)

3. In recent years Clausewitz has attracted the critical attention of leading military historians Martin van Creveld and John Keegan. See Martin van Creveld, *The Transformation of War* (New York: Free Press, 1991), and *Nuclear Proliferation and the Future of Conflict* (New York: Free Press, 1993); and John Keegan, *A History of Warfare* (London: Hutchinson, 1993). Keegan's assault upon Clausewitz is roughly handled in Christopher Bassford, "John Keegan and the Grand Tradition of Trashing Clausewitz: A Polemic," *War in History*, November 1994, pp. 319–36.

4. William A. Owens (Adm., USN), *High Seas: The Naval Passage to an Uncharted World* (Annapolis, Md.: Naval Institute Press, 1995), p. 177.

5. Ibid., pp.177–8.

6. See Andrew W. Marshall, "Revolutions in Military Affairs," Statement before the Senate Armed Services Committee, Subcommittee on Acquisition and Technology, 5 May 1995.

7. "The Software Revolution: A Survey of Defence Technology," *The Economist*, 10 June 1995, p. 18.

8. Andrew F. Krepinevich, "Cavalry to Computer: The Pattern of Military Revolutions," *The National Interest*, Fall 1994, p. 30. (Emphasis supplied.)

9. As was noted appropriately in James R. FitzSimonds and Jan M. van Tol, "Revolutions in Military Affairs," *Joint Force Quarterly*, Spring 1994, p. 27.

10. "Software Revolution," p. 18.

11. See Colin S. Gray, "Vision for Naval Space Strategy," U.S. Naval Institute *Proceedings*, January 1994, pp. 63–8, and *The Navy in the Post–Cold War World: The Uses and Value of Strategic Sea Power* (University Park, Penna.: Pennsylvania State Univ. Press, 1994), chap. 7, "Maritime Power and Space Strategy."

12. Colonel Alan D. Campen, quoted in "Horizon," *The I-Bomb*, text adapted from television program broadcast 27 March 1995 (London: BBC, 1995), p. 5. Even if his claim is interpreted narrowly as referring to coalition endeavours to block all Iraqi command and control channels, the thesis is still improbable.

13. Michael Howard, "The Forgotten Dimensions of Strategy," *Foreign Affairs*, Summer 1979, pp. 975–86.

14. Clausewitz, p. 605. "Its [war's] grammar, indeed, may be its own, but not its logic."

15. A valuable source is James A. Dewar, et al., *Assumption-Based Planning: A Planning Tool for Very Uncertain Times* (Santa Monica, Calif.: RAND Corporation, 1993).

16. Far from fulfilling its promise of being economical, swift, and decisive, air warfare in World War II proved protracted and attritional in character.

17. See Edward N. Luttwak, "Toward Post-Heroic Warfare," *Foreign Affairs*, May/June 1995, pp. 109–22.

18. See Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century* (Boston: Little, Brown, 1993), chap. 9.

19. Luttwak.

20. Owens, pp. 175–6.

21. The security dilemma is stated admirably by Owens: "We should design military forces, and use the ones we have, in ways that do not goad others to challenge us militarily, and we should build forces that are unchallengeable" (p. 176). The idea that unchallengeable U.S. forces could be built and sustained and that the huge military imbalance produced would be tolerable to other great powers seems to me to verge on the fanciful. The most detailed scholarly treatment of the concept of a security dilemma is Nicholas J. Wheeler and Ken Booth, "The Security Dilemma," in *Dilemmas of World Politics: International Issues in a Changing World*, eds. John Baylis and N.J. Rengger (Oxford, UK: Clarendon Press, 1992), pp. 29–60.

22. This framework owes much to the analysis in C.J. Bartlett, *Great Britain and Sea Power, 1815–1853* (Oxford, UK: Clarendon Press, 1963).

23. With reference to the United States, this proposition is argued in Colin S. Gray, "Strategy in the Nuclear Age: The United States, 1945–1991," in *The Making of Strategy: Rulers, States, and War*, eds. Williamson Murray, MacGregor Knox, and Alvin Bernstein (Cambridge, UK: Cambridge Univ. Press, 1994), pp. 579–613. Also see the three articles on strategic culture in *International Security*, Spring 1995: Stephen Peter Rosen, "Military Effectiveness: Why Society Matters," pp. 5–31; Alastair Iain Johnston, "Thinking about Strategic Culture," pp. 32–64; and Elizabeth Kier, "Culture and Military Doctrine: France between the Wars," pp. 65–93.

24. For information dominance, FitzSimonds and van Tol, p. 27.

25. This is the thesis of van Creveld.

26. The Desert Storm reference is a criticism much in evidence in Andrew F. Krepinevich, "The Military Revolution: Restructuring Defense for the 21st Century," Statement before the Senate Armed Services Committee, Subcommittee on Acquisition and Technology, 5 May 1995.

27. Van Creveld, pp. 35–42.

28. For "complex interdependencies," see Robert O. Keohane and Joseph S. Nye, *Power and Interdependence: World Politics in Transition* (Boston: Little, Brown, 1977).

29. Experience of low-intensity conflict actually has been clearly dominant in the modern history of the British Army and, arguably, for the U.S. Army also. In the latter regard, see Sam C. Sarkesian, *America's Forgotten Wars: The Counterrevolutionary Past and Lessons for the Future* (Westport, Conn.: Greenwood, 1984). The textbook of, and for, the British experience was C.E. Callwell, *Small Wars: A Tactical Textbook for Imperial Soldiers* (London: Greenhill Books, 1990; first pub. 1896). Hew Strachan, "The British Way in Warfare," *The Oxford Illustrated History of the British Army*, ed. David Chandler (Oxford, UK: Oxford Univ. Press, 1994), makes the point that "Britain's military experience over the last two centuries has not been predominantly European" (p. 422). He proceeds to note that "Britain's 'historic practice' has been colonial and imperial" (p. 423).

30. See Michael R. Gordon and General Bernard E. Trainor, *The Generals' War: The Inside Story of the Conflict in the Gulf* (Boston: Little, Brown, 1995), especially pp. 241–4.

31. Toffler, quoted in "Horizon," *The I-Bomb*, pp. 9–10.

32. Campen, p. 11.

33. J. C. Wylie (RAdm., USN), *Military Strategy: A General Theory of Power Control* (Annapolis, Md.: Naval Institute Press, 1989; first pub. 1967), p. 72.

34. The text on this principle of paradox is Edward N. Luttwak, *Strategy: The Logic of War and Peace* (Cambridge, Mass.: Harvard Univ. Press, 1987).

35. This unfashionable thought is prominent in A.J. Bacevich's deeply skeptical analysis, "Preserving the Well-Bred Horse," *The National Interest*, Fall 1994, pp. 43–9.

36. Krepinevich ("Cavalry to Computer") identifies no fewer than ten candidate military revolutions from the time of the Hundred Years War (1337–1453) between England and France to the 1950s.

37. Wylie, p. 72. (Emphasis removed.)

38. The thesis of Colin S. Gray, *The Leverage of Sea Power: The Strategic Advantage of Navies in War* (New York: Free Press, 1992).

39. See Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War," *International Security*, Winter 1992/93, pp. 59–90; and David Nicholls and Todor D. Tagarev, "What Does Chaos Theory Mean for Warfare?", *Airpower Journal*, Fall 1994, pp. 48–57.

40. See Colin S. Gray, "Global Security and Economic Well-being: A Strategic Perspective," *Political Studies*, March 1994, pp. 25–39.

41. Luttwak.

42. Donald Kagan, *On the Origins of War and the Preservation of Peace* (New York: Doubleday, 1995), p. 570.

Ψ

The New "RMA"
It's Only Just Begun

Captain James H. Patton, Jr., U.S. Navy, Retired

AT 9:02 A.M. ON 19 APRIL 1995, a large truck bomb was detonated in front of the Murrah Federal Building in Oklahoma City, Oklahoma, causing a great loss of innocent life. As reports of the bombing began to filter in, it appeared to have all the earmarks of Middle Eastern terrorism. Responding to that indication in his first public remarks on the bombing, President Bill Clinton stated that when those responsible were identified, "punishment would be swift." Very quickly, the several foreign groups and states that might first come to mind as possible perpetrators of such an act of violence virtually stumbled over themselves and each other to deny vehemently any complicity.

Shortly thereafter, it became apparent that the bombing had been the work of U.S. citizens. Nothing can detract from the senseless horror of that event or mitigate the disgust of its having been planned by Americans against Americans. For the purposes of this article, however, certain critically important observations arise from the early response of the U.S. government to the Oklahoma bombing.

First, when the president assumed it to have been foreign-sponsored, he evidently thought that as Commander in Chief he had assets that would allow him to reach out quickly, precisely, and decisively. The president otherwise would have been unlikely (and unwise) to have used the words "punish" and "swift" in a case not subject, as he then thought, to domestic criminal jurisprudence.

Second, foreign entities that might have been suspected of such a terrorist attack evidently believed that the "terrible swift sword" of instant, massive retaliation was not an idle threat and that to claim responsibility (or even be slow in denying it) was tantamount to inviting a flock of Tomahawks to their back doors.

Captain Patton, a submariner during his U.S. naval service, is the president of Submarine Tactics and Technology, Inc., in North Stonington, Connecticut. A frequent speaker and commentator on naval subjects, he has published in *Comparative Strategy*, *Defense Science*, *Jane's International Defence Review*, the U.S. Naval Institute *Proceedings*, *The Submarine Review*, this journal, and others.

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Third, however, the United States in fact presently falls considerably short of being able to execute the kind of attack which American leaders and their potential adversaries seem to have believed it could: discriminate, quick, over long distances, with virtual certainty of no losses. Nevertheless, it appears possible that in the next few years the U.S. will become able to deploy integrated "reconnaissance-strike" systems approximating such a capability, through what has been termed another "revolution in military affairs," or RMA.

The New RMA: What Is It?

Most military hardware and tactics are subject to "evolution" with time—swords get better as man moves from bronze to iron; catapults grow larger to throw bigger stones farther; and aircraft fly higher and faster as more powerful engines are developed. On the other hand, a few singular things and ways of using them have dramatically changed the entire complexion of how men conduct warfare against one another. These "revolutions"—certainly including gunpowder, the machine gun, and submarines—have been widely recognized only after the fact. Today, reasonable people, even those who agree that another revolution is coming, differ as to what might be its ingredients. Military historians advise us to examine the Nazi blitzkrieg, which swept away Polish, French, and British resistance in 1939 and 1940, and contrast that success with the unexploited initial success of British tanks at Cambrai in 1917.[1] Russian scholars suggest that to understand the next RMA fully, one must study the Cold War writings on "military-technical revolutions" by Soviet theoreticians. Officers presently serving on the Joint Staff maintain that one need only listen to Admiral Bill Owens for about twenty minutes.[2]

Although generally each RMA has some seminal event which can later be identified as its genesis, each also has its own unique maturation process, which might be compared to the four ages of man—infancy, adolescence, adulthood, and old age. For example, a military curiosity during the American Civil War, the Gatling gun found greater utility in the Boer and Crimean Wars, created unprecedented slaughter during World War I, and now, in widely proliferated and easily concealed handgun variants, is used daily in thousands of criminal acts around the world.

However one approaches the emerging RMA, there appears to be a wide consensus that it has left its period of infancy. Today, the resolution of definitional uncertainty is more than an academic debate if one is to shape that revolution rather than be swept away by it. The need to think clearly about future confrontations with potential military adversaries—preferably before the historically probable emergence of a "peer competitor" within a decade or two—is of paramount importance to the world's only current superpower. It

becomes even more compelling when we note that the party initiating an RMA is often not its beneficiary. While the British introduced the tank in ground warfare, it was the Germans, two decades later, who first mastered the innovation's revolutionary possibilities. The Department of Defense Joint Requirements Oversight Council (JROC) has been tasked to assess the concepts, prospects, and pitfalls of the new RMA for the U.S. military.

What will be the final elements of this now adolescent revolution? The sheer number of different "defining" properties that have been proposed is nearly overwhelming, just as they probably were in the formative stages of past trends and technologies now recognized, in retrospect, to have been military revolutions. The superlative performance of the U.S. military during Desert Storm (certainly, at least, with respect to training and technology) validated the RMA's existence and seemed to point the way to further refinement. Ever since then, talented and thoughtful observers of military affairs have been trying to capture, in brief descriptive phrases, the attributes of the fully developed revolution which that campaign foreshadowed. These have included: joint operations; nonlethal technologies; mobile, agile, and flexible forces; near-real-time reconnaissance and precision strike; "Information Warfare"; survivability and stealth; "dominant battlefield maneuver"; revolutionary concepts of operation and organization; and others that are being added with each new white paper or defense policy vision.

If identifying a revolution soon after it appears is not a simple task, predicting or defining its final form before it matures is likely to be impossible. Almost all speculations appear to have considerable merit. But if we distill the essential spirit from the lists of RMA-shaping requirements that are now influential within Washington circles, we come up with the following:

The emerging revolution in military affairs will eventually be characterized by the capability . . .

- to see, appraise, and respond quickly to a military threat by . . .
- striking that threat, as warranted, with precision-guided munitions, even over great distances, . . .
- while employing an optimum but overwhelming and survivable force.

What Do We Need?

Perhaps this rough summary of the capabilities to be expected in the matured RMA can be readily agreed on, but the methods by which to measure them—i.e., to assess what they offer and what they require—cannot be. Let us begin by disaggregating the definition.

To See, Appraise, and Respond Quickly . . . It turns out that for much of Desert Storm we could not believe our eyes—or should not have. One operational objective in that war was to strike a number of targets associated with the Iraqi nuclear program. The mission was executed with stealth and precision: the F-117s that carried out 80 percent of the attacks on nuclear (as well as chemical and biological) sites placed their guided weapons within ten feet of the aim point 80 percent of the time.[3] The problem was not in planning or execution but in the information on which the entire operation rested. It had been assumed that the data previously collected on the Iraqi nuclear program was accurate, and on that basis the attacks were assessed to have effectively neutralized it. But postwar inspections by the International Atomic Energy Agency discredited that entering assumption; the IAEA identified and destroyed far more of the Iraqi nuclear infrastructure than did coalition military power.[4]

The information collected may have been valid, as far as it went. But in the future as surveillance and reconnaissance systems proliferate and their outputs are funneled into a single pool for fusion and distribution, the amount of data collected and the time required to process it suggest that unique, time-sensitive items imbedded therein will be retrieved—if found at all—only after they have become irrelevant or false. We may still be on the crest of the Tofflers' "third wave" of information, but, as Sun Tzu noted considerably earlier, the ultimate goal of any struggle is to dominate a competitor not in information but in *knowledge*.[5] Humans perceive "knowledge" within, or derive it from, properly condensed objective information that is itself extracted from raw data; data is to information is to knowledge as seed is to crops is to grain. Steps in the process from the first to the last can be accelerated or enhanced, but the sequence cannot be altered. Therefore a true revolution in our "see, appraise, respond" loop must increase accuracy as data is "morphed" into knowledge.

It must also shorten the time involved in this process, since it is not just knowledge we need but knowledge in time. As the U.S. Air Force was dropping precision-guided munitions on aim points (but not necessarily on the real targets) during the first weeks of Desert Storm, a technical review panel was meeting in Washington to define the requirements of a Navy program called "Copernicus." It was a plan to fuse and collate, on shore, data from all information sources and sensors and then send processed information, tailored for each unit, to forces afloat—a virtually paperless data-to-information stream. This approach was diametrically opposed to the once-preferred philosophy of "send me everything, I'll sort it out here." This original concept has since been updated to adapt to the needs and requirements of Information Warfare.[6] It could be noted as well that the problem of information gathering, processing, and dissemination was highlighted in the recent loss of U.S. helicopters to "friendly fire" over Iraq and the decidedly unfriendly downing of an F-16 over Bosnia. Thus the expected

"see, appraise, respond" dimension of the revolution will not be so much providing "information in real time" as "real information in time"—a much more practical and valuable commodity. In fact, the often heard term "near-real time" could be defined precisely as "quickly enough so as not to slow the process in question."

Striking with Precision-Guided Munitions over Great Distances . . . Let us assume that enough data has been collected and processed, quickly enough, into information that, when disseminated, produces knowledge of a target's location. Now the question of whether and how to attack must be addressed. With what weapon, from what platform, under whose command, and with whose permission will the attack be conducted? These pesky sub-questions have been traditionally swept up as loose ends by the ubiquitous "C3"—command, control, and communications—euphemism, the inadequacies of which are all too easily wished away by adding another C, for Computers, or an I, for Intelligence. But if C3 (or C4, or C4I) is the answer, what was the question? Is the RMA to allow us to "shoot by cursor"? Do we want someone in "cyberspace" to be able to "double-click" on a PC screen icon and thereby cause the destruction of a target it represents? Will the attacking "mouse" be located on neither the platform that senses the target nor the one that carries the weapon? Are we to trust electronics to perform or inhibit functions previously controlled by a human "in the loop"?

This ultimate issue is unlikely to occur in the foreseeable future, and that level of sophistication is probably not necessary to see the RMA through its adolescence. However, it does appear that, if only for safety reasons, humans are beginning to abandon their cultural obsession of attempting to supervise—with typical human reaction times measured at best in tenths of seconds—all the actions of their machines (which now have cycles measured in nanoseconds). In military terms, we apparently have accepted the need to relinquish some personal supervision during the information-gathering half of the process; even now, data is often collected and processed into information somewhat autonomously. Perhaps a key to consummating the emerging RMA is dispassionately determining just where—on the "strike" side—nonhuman elements can be employed for the sake of their greater speed and, therefore in some cases, greater safety. However, initiating a war or prosecuting one already begun is not a decision we conceivably will wish to delegate to machinery, no matter how revolutionary its technology and regardless of the precision we might be able to obtain in practice.

An Optimum, Overwhelming, Survivable Force . . . Can an RMA occur (at least in a desirable form) if a key criterion is that it must be economical? Where does the ratio of the cost of the weapon to the value of the target become excessively

high? And while there certainly are fiscal dimensions to what we are outlining, there are other kinds of costs that can and should be minimized.[7] Without deprecating at all the perseverance of the U.S. F-16 pilot who in 1995 survived a week before his dazzling rescue from the hills of Bosnia, it should be noted that in Vietnam this sort of rescue happened daily but rarely received such press coverage. The important point arising here is that huge political costs, international and domestic, are now associated with combat losses incident to the projection of U.S. military power—particularly so in smaller conflicts, but presumably in high-intensity campaigns as well. Once again, Desert Storm set a revolutionary standard of maximum force and minimum loss. Judicious employment of very-low-observable (and therefore virtually unengageable) platforms can do much to mitigate these non-fiscal costs as well as to reduce the actual dollars otherwise needed to provide non-stealthy aircraft with airborne electronic warfare support.

As the emerging RMA matures, we can reasonably expect the "see, appraise, and respond" grid and the "strike with precision" network to allow long-range, covert fire, on call. Intuition and experience imply that stealth is an enabling technology for the RMA and that low-observable platforms will be integral and unseen components, both as observers in the "see" phase and covert shooters during the attack. If we continue to assume that there is no substitute for people in the "strike" loop, then they will need to be shrouded in stealthy platforms and armed with accurate, versatile weapons. Nevertheless, the cost of the capabilities to be employed must not be disproportionate to the objectives being sought.

How Are We Doing?

Thus far we have suggested that an RMA, with certain distinctive characteristics, can be seen to be emerging and that having perceived it early on, we should make an effort to understand it in terms of fundamental capabilities that it could offer when mature. With this done, we may ask: Which platforms or programs, now deployed or in development, appear most promising for realizing this revolution?

One of the "stars" of the Gulf war was the E-8C Joint Surveillance Target Attack Radar System (or Joint STARS), which, in monitoring huge battlefields, does for ground warfare what the Airborne Warning and Control System (or AWACS, the familiar Boeing 707 with a "dish" on top) does for air-to-air combat. Joint STARS, still developmental when pressed into wartime service, combines state-of-the-art avionics with a venerable but updated airframe. Using a large synthetic-aperture radar array and sophisticated signal processing, it looks hundreds of kilometers into an adversary's territory to spot groups of such targets

as trucks or tanks, or even individual ones, and it can determine if a given vehicle is tracked or wheeled. Unclassified photography of Joint STARS display screens actually shows runs of barbed wire barricades, with gaps where they had been breached by invading coalition forces during Desert Storm. In the foretaste of the RMA we were given in that war, information assembled from Joint STARS was downlinked to an existing Army C3 system; it was used also by a command element on board the 707 to assign targets to F-15Es and other ground-attack aircraft in real time. There seems no reason not to connect this "see, appraise, respond" tool to other "strike" users as well, such as carrier battle groups, in the near term. Serving in the future as a "common support aircraft" managing the overall cycle of events, the Joint STARS aircraft could itself initiate the launch of precision-guided munitions from what it knows to be the most appropriately armed and located magazine.

Stealthy nuclear-powered attack submarines—having freed themselves from a (then appropriate) Cold War dogma that inhibited their willingness to coordinate or communicate with other platforms—have begun to be more responsible, and extraordinarily capable, citizens. They now routinely transit shallow straits submerged to perform scouting, mine localization, and other reconnaissance functions for tactical commanders close to contested coasts. Moreover, they frequently do so while maintaining continuous two-way communications with that commander, where they once might have insisted that they could provide little more than a written patrol report upon their return to homeport. The submarine community has also revised its corporate view of the strike mission; where submariners used to prefer a magazine with "wall to wall" dual-purpose (antisubmarine and anti-surface ship) torpedoes, they now recognize the benefits to their own mission of carrying a broad variety of weaponry (torpedoes, mines, Tomahawks) close to a potential adversary's shoreline, unseen. As the RMA begins to establish synergy between reconnaissance and strike platforms, one could envision a Joint STARS aircraft at stand-off range working in tandem with a covert submarine to bring weapons to bear from a direction unanticipated by the enemy.

Other systems can and should participate in the "see, appraise, respond" complex. For example, the U.S. Army has developed a small and inexpensive unmanned aerial vehicle (or UAV) capable not only of distant visual and radio-frequency surveillance but also of attack, either remotely directed or "intelligently" autonomous, upon important targets. The same kind of UAV can be launched from a submerged submarine to conduct reconnaissance, perform bomb damage assessment of previous targets, or even protect the submarine from antisubmarine aircraft. The information gathered by the UAV could just as easily be uplinked to a satellite, through which it joins the Copernicus structure, whose fused and processed output would be recognizable to all users as, if not

"knowledge," at least as timely and accurate an automated facsimile of it as is technologically possible.

Perhaps the most dramatic event of Desert Storm was the establishment of air superiority literally overnight, not by shooting down all the opponent's fighters but by "surgically" employing unengageable attack aircraft, the (admittedly short-ranged and lightly armed) F-117. The "stealth fighter" was employed to "decapitate" the Iraqi air defense and C3 infrastructure; for the most part it did so without the large numbers of supporting aircraft required to suppress enemy defenses for non-stealthy attackers. The lessons of this feat are still being digested, but the F-117's display of stealth, economy of force, and survivability might easily identify it in retrospect as an RMA-precursor, analogous to the blitzkrieg of 1939.

One of the strongest single contributors to the forthcoming revolution in military affairs, however, will be the B-2, a super-stealthy, intercontinental-range attack aircraft capable of carrying a heavy payload. With the B-2 the U.S. is fielding a single system embodying four capabilities central to the RMA: strike over great distances, precision weapon delivery, a payload assuring overwhelming force (if the aircraft is procured in adequate numbers), and survivability. Also, like its stealthy cousin the nuclear-powered submarine, the B-2 offers options for surveillance, reconnaissance, and even battle management roles.[8] Linking Joint STARS, the B-2, and precision direct-attack weapons produces what is probably the closest approximation in currently available systems of what the RMA "wants to be."

But there are other possibilities as well. The Aegis cruiser and its little brother, the *Arleigh Burke* guided missile destroyer, have expanded their horizons from fleet defense against manned aircraft and primarily air-breathing missiles to detection and interception of theater ballistic missiles, launched hundreds of miles away. Undoubtedly, any RMA-era joint theater operation will see Aegis ships involved in near-real time exchange of detection, tracking, and target assignment parameters with Army Patriot or Theater High-Altitude Area Defense (THAAD) batteries ashore, perhaps even with covertly orbiting B-2s launching interceptors against the ballistic missiles during their ascent phase.[9] Or, the same Aegis ships—using offensive weapons also in their magazines—might join with B-2s to attack enemy mobile launchers detected by Joint STARS aircraft.

Whole new strike modes are also emerging, such as launching the ATACM (Army Tactical Missile System) from the vertical launch tubes of submarines or surface ships. Able to throw unitary or submunition-type warheads some two hundred miles in four minutes, this combination could offer Joint STARS an excellent way to attack a suddenly visible surface-to-air missile launcher or tank column. In that event, an Air Force sensor operator and coordinator might be

directing a Navy platform to release an Army weapon in direct support of Marines. In a variant arrangement, the Navy's "cooperative engagement capability" fire control system would link a network of battle group sensors and joint weapons into a single, distributed antiair warfare system: a ground-based missile launched against a U.S. battle group over the horizon could be detected by Joint STARS, tracked by AWACS, targeted by Aegis, and destroyed by a Patriot.

This brief look at the emerging revolution in military affairs has focused on some important pieces of the puzzle—new configurations of systems already existing or soon to exist—but there are many ways in which the puzzle can be assembled, and there are some key parts missing. The RMA cannot comprise just the B-2 or "New SSN" by themselves; there must be stealthy attack platforms, integrated command and control, precision munitions, new operational concepts, and new organizational structures. That is why such revolutions, however explosive their onset, take so long to mature (fifteen years is a fair average) and why their effects last considerably longer than that.

The United States currently occupies an enviable position at the threshold of this revolution, but its lead is by no means guaranteed. As Admiral Owens has noted, how fast the U.S. completes a transition to this new basis for deterrence and defense "depends on defense planning and programming decisions that will be made over the next several years."[10] The process of acquiring, operating, and integrating such "systems of systems" as envisioned here will in itself clarify and simplify the concepts and structures required to expand the speed and scope of the RMA in the future. All of the capabilities, definitions, requirements, priorities, and scenarios this article has discussed, and many others, will be reviewed by defense management structures such as the JROC, which will then recommend how to cultivate the RMA—in order to see and then respond with a quick, cost-efficient, survivable, precise, non-nuclear strike . . . from a distance.

Notes

1. For an excellent treatment of the dramatic employment of armor in the fall of France, 1940, see Alistair Horne, *To Lose a Battle* (London: Penguin, 1969).

2. Admiral William A. Owens, U.S. Navy, former Vice Chairman of the Joint Chiefs of Staff and a theorist on (as well as an implementer of) the emerging RMA, has written that of particular importance are technologies supporting "ISR" (intelligence, surveillance, and reconnaissance), "C4I" (command, control, communication, computers, and intelligence), and "PGMs" (precision-guided munitions). See William A. Owens (Adm., USN), "The Emerging System of Systems," U.S. Naval Institute *Proceedings*, May 1995, pp. 36–9.

3. Thomas A. Keaney and Eliot A. Cohen, *Gulf War Air Power Survey: Summary Report* (Maxwell AFB, Ala.: Air University, 1993), p. 80. See also Barry D. Watts and Thomas A. Keaney, "Part II: Effects and Effectiveness" in *Gulf War Airpower Survey, Vol. II, Operations and Effects and Effectiveness* (Washington: U.S. Govt. Print. Off., 1993), p. 389.

4. David Kay, "Arms Inspections in Iraq: Lessons for Arms Control," unpublished paper, 12 August 1992, p. 5. Kay led several IAEA teams in Iraq. Other Gulf war episodes demonstrating the distinction between "aim points" and "targets" include the attacks on Iraqi air-raid shelters and the problematic effectiveness of the Patriot air defense system in the protection of cities.

5. Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century* (New York: Little, Brown, 1993). For Sun Tzu, see *The Art of War*, trans. Samuel B. Griffith (New York: Oxford University Press, 1971). Much of what this ancient "Clausewitz of the Orient" had to say about the basic principles of war remains as insightful today as when it was written.

6. "Copernicus Forward," the fourth revision of an original 1990 document, now combines the Navy's "Forward . . . from the Sea" strategy with concepts of Information Warfare. See "For first time, 'Copernicus' architecture addresses information warfare," *Aerospace Daily*, 9 June 1995, p. 392.

7. A real danger is that the marginal cost increases needed to invest in truly revolutionary systems will be driven out of a compressed defense budget by routine items (e.g., tents and trucks) sheltered under the umbrella of "readiness."

8. Charles M. Perry, Robert L. Pfaltzgraff, and Joseph Conway, *Long-Range Bombers and the Role of Airpower in the New Century* (Washington: Institute for Foreign Policy Analysis, 1995), p. viii.

9. For an excellent, in-depth discussion of the conceptual role of sea-based Theater Ballistic Missile Defense, see Robert M. Soofer, "Ballistic Missile Defense from the Sea," *Naval War College Review*, Spring 1994, pp. 60–71.

10. Owens, p. 39.

Ψ

Professionalization and American Naval Modernization in the 1880s

William H. Thiesen

FOR DECADES, NAVAL HISTORIANS HAVE pointed out that the 1880s were remarkable for debates about American naval policy.[1] Theories put forth in these debates provided "a thought-reservoir from which Alfred Thayer Mahan, the members of Congress, and others after them drew" to develop a blue-water naval strategy that became the United States Navy's basic policy in the 1890s and beyond.[2] In fact, however, this decade marked a turning point for the American navy in more ways than the theoretical. In addition to heralding the end of the commerce-raiding approach of the post–Civil War era and the beginning of open-ocean fleet tactics, the 1880s were also a period of great significance to American naval power for two other reasons: professionalization of the officer and engineer corps, and the rapid development of naval technology. The 1880s signalled an end to what has been called the Navy's "dark ages," the years of stagnation immediately following the Civil War, and the beginning of a "New Navy."[3]

In the second half of the nineteenth century, social and technological changes in Europe contributed to highly volatile international relations. By the late 1870s, growing imperialism and a nascent arms race were increasing diplomatic tensions in the Western Hemisphere and the Pacific. For instance, France's designs on Central America had already been confirmed by the puppet state it established in Mexico during the U.S. Civil War; hence, when the builder of the Suez

Mr. Thiesen is a Hagley Fellow in the Department of History at the University of Delaware. Formerly, he was a Brewster Scholar in the Program in Maritime History and Nautical Archaeology at East Carolina University, where he received a master of arts degree. His master's thesis concerns the ABCD warship program and the transformation of American naval policy in the 1880s.

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Canal, Count Ferdinand de Lesseps, began digging a canal in Panama in 1881, Americans became unusually sensitive. For its part, Germany grew increasingly determined to expand its colonial empire through acquisitions in the Western Hemisphere and the Pacific. As for Britain, relations with the United States had remained strained since the Civil War, due to British support of the French experiment in Mexico, complicity in the depredations on Union shipping by the Confederate raider *Alabama*, and postwar competition for naval dominance in the Pacific. Spain and the United States had nearly come to blows in 1873 in connection with the Cuban revolution then underway, when a Spanish ship seized the gun-runner *Virginius* flying (illegally, as it turned out) the American flag. Finally, when in 1879 war broke out between Chile and its neighbors Peru and Bolivia, the United States failed to intervene on behalf of Peru (with which there were ties of sympathy and economic interest) because the U.S. fleet was vastly inferior to Chile's modern ironclads. Americans, then, had grown anxious about violations of the Monroe Doctrine, the prospect of a French-owned Panama canal, and the threat of technologically superior foreign navies that could quickly annihilate the obsolete American fleet.[4]

In response, Congress authorized the construction of 150,000 tons of steel warships between 1880 and 1890. Comparison of this statistic with the total of less than 30,000 tons of wooden and iron warships built between 1870 and 1880 indicates how dramatic was the shift naval policy experienced during the 1880s.[5] In order, however, to maintain a fleet capable of providing muscle for American diplomacy, the United States Navy required not only modern warships but also a professional and technically competent corps of officers and engineers to maintain and operate them. What follows is a brief history of the social and professional changes that occurred in the Navy during the 1880s, the decade that made possible the development of America's modern navy.

The building of a modern fleet required not only new technology but a new type of sailor. By 1880 naval officers had already published articles calling for improved technical training for enlisted men.[6] The Navy added in the following decade nearly twice as many ratings ("trades," in British usage) as were added during the fifteen years following the war, establishing the ratings of Electrician in 1883 and Oiler in 1884; in that year also, Boilermakers and Finishers were incorporated into the rating of Machinist.[7] During the next ten years, differences grew over how personnel should be trained to cope with the increasing mechanization of the Navy, culminating in a flurry of articles in the U.S. Naval Institute *Proceedings* between 1890 and 1905.[8] This debate generally pitted older, veteran officers, who advocated sail training, against a post–Civil War generation of Naval Academy graduates who urged specialized technical training.[9] Greatly inflaming this conflict was the growth of the technical expertise and political power of naval engineers since the Civil War, at the expense of "line" officers

(that is, "seaman" officers, eligible for command at sea). As ships of war became increasingly sophisticated, line officers were forced to relinquish more and more control to subordinate specialists, such as engineers.[10] Veteran officers failed to anticipate the rapid technological changes taking place around them, but as the influence of the old guard waned from the 1870s on, that of engineers and technically trained Academy graduates grew, and so the drive for naval modernization and professionalization cleared a major hurdle.

The Naval Academy had already begun to produce graduates of distinction in science and engineering by 1880, many of whom began fruitful careers during the subsequent decade. William T. Sampson, honor man for the class of 1861, became superintendent of the Academy in 1886 after having served as head of the Department of Physics and Chemistry from 1874 to 1879. As department head he had introduced new courses in electricity and metallurgy, and during his five-year superintendency he stressed the importance of applied science and technical training in the curriculum. He invited distinguished scientists to lecture at the Academy, and he emphasized the value of hands-on experience in the Academy's machine shops.[11] Between 1879 and 1881, arctic explorer Lieutenant George Washington De Long (class of 1865) undertook an expedition to investigate the territory north of the Bering Strait.[12] Albert A. Michelson ('73) conducted important experiments with refraction and calculated the speed of light, eventually becoming the nation's leading physicist, its first Nobel laureate, and an instructor at Annapolis. Bradley A. Fiske ('74) published his popular *Electricity in Theory and Practice* in 1883. By that time, Frank J. Sprague ('79) had achieved national recognition as a pioneer in electricity; leaving the Navy to become Thomas Edison's assistant, he was to invent electrical appliances, control devices, signals, and electrical railway equipment and elevators, most of them marketed under Edison's name. William S. Sims ('80) would revolutionize naval gunnery by introducing the Sims-Scott continuous-aim fire control system to the U.S. Navy. William L.R. Emmet ('81) was to join the General Electric Company, where he would engineer numerous electrical appliances and play a major role in developing steam-turbine technology.[13]

Engineers Sprague and Emmet were products of the Academy's cadet engineer program, established in 1870 to give prospective naval engineers technical courses in conjunction with classes normally offered to cadets. In addition to engineering, graduates of this program excelled in such occupations as education, naval architecture, and business. As the country came increasingly to rely on modern technology and private industry during the late nineteenth century, the federal government helped to promote the education of civilian naval architects and marine engineers by turning naval personnel into college instructors. In 1879, Congress had authorized the Navy to send naval engineers

to various universities to teach; they were assigned to such schools as the University of Pennsylvania, Vanderbilt, Purdue, Johns Hopkins, and all the leading land-grant institutions, such as Cornell. Of the forty-three Academy graduates so assigned, all but five had been a part of the cadet engineer program; such distinguished professors of mechanical engineering as Mortimer E. Cooley, Arthur T. Woods, and William F. Durand established their careers in this way. The government, however, ended the practice in 1896.[14]

The Academy's program for training naval constructors and engineers had begun to change in the late 1870s. Previously, naval constructors had typically taken up the trade of their shipwright fathers, much as their civilian counterparts did; secondary education was followed by an apprenticeship in a navy yard. Some constructors acquired additional skills on their own, such as John Lenthall, whose fluency in French allowed him to follow trends in French naval architecture; however, not all naval constructors enjoyed such skills.[15] Even the Academy

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offered its cadets (as they were then known) only a one-term course on the rudiments of shipbuilding and design, intended to "give them such an idea of the subject that they might be able at all times to call the various parts of the floating structure they were destined to inhabit by their proper names, and to know more of the manner in which it was constructed."[16] Through 1880, such chief naval constructors as John W. Easby and Theodore D. Wilson called on the Navy to provide a proper education for prospective members of their profession. Their arguments found a degree of support among successive Secretaries of the Navy.[17]

By 1879 the Secretary of the Navy had recognized the importance of training naval architects for the service and had begun selecting cadet engineers to send abroad to study that discipline. After their formal course work, the Navy assigned most of these prospective engineers to the Royal Naval College in Greenwich, England, and some to naval architecture programs at schools in Glasgow or Paris.[18] One product of this program, David W. Taylor ('85), became one of the world's foremost hull designers for both naval and commercial vessels; he also became Chief of the Bureau of Construction and Repair shortly before World War I, providing the genius and leadership behind America's naval buildup and the early development of naval airplane and airship construction programs.[19]

Between 1879 and 1884 the Navy sent six cadet engineers overseas to study. Three of them, Francis T. Bowles (class of 1879), Homer L. Ferguson ('82), and Lewis B. Nixon ('82), later became industrialists, heading the Fore River Ship and Engine Company, Newport News Ship and Engine Company, and Crescent Shipyard, respectively. Nixon was to advance even further, becoming in 1902 president of the United States Shipbuilding Company, a trust comprising six of the nation's leading shipbuilding firms and the Bethlehem Steel Company.[20]

As did many other occupational groups, naval personnel began in the late nineteenth century to organize into specialized associations; three influential professional societies dedicated to the betterment of the Navy and naval-related technology appeared. The first such association was the United States Naval Institute, formed at Annapolis in 1873. Captain Stephen B. Luce and a group of fellow officers established it to afford "a medium for the free interchange of serious thought and the debate of important subjects concerning naval science and practice."[21] In 1880 the American Society of Mechanical Engineers (ASME) was founded with the aid of serving and retired naval personnel. One of the latter, Robert H. Thurston, had served as a naval engineer in the Civil War and later became an instructor at the Naval Academy, where he introduced new courses in steam engineering. Before helping found the ASME, he had distinguished himself in the field of engineering education, most notably at the Stevens Institute of Technology. Other prominent ASME members with naval backgrounds included E.D. Leavitt, George Westinghouse, William Durand, M.E. Cooley, and Ira N. Hollis.[22] In 1888 a group led by Passed Assistant Engineer George W. Baird, later known for installing electric lighting in the White House, established the American Society of Naval Engineers in Washington, D.C., the seventh engineering society founded in the United States.[23] Members included former Engineer-in-Chief Benjamin Isherwood and current Engineer-in-Chief George W. Melville, arctic explorer and co-founder of the National Geographic Society.

The rapid worldwide development of naval technology during this period also encouraged officers and engineers to publish articles and books. In addition to Fiske's important work on electricity, Chief Engineer J.W. King published *The War-Ships and Navies of the World*, 1880, and F.T. Bowles published *Ships of War*, in 1885.[24] The Naval Institute had begun publication of its *Proceedings* in 1874. Although more of its articles were written by line officers than engineers or naval constructors, *Proceedings* provided a rich source on such topics as naval technology and machinery.[25] Philadelphia publisher Lewis R. Hammersly produced *The United Service* sporadically between 1879 and 1905; though most of its articles concerned military policy, operations, and history, it often published

work of a technical nature, with such titles as "Education of Naval Constructors," "The Employment of Quick-Firing Six-Pounder Shell-Guns for the Naval Service," and "The Most Efficient Battery for a Dispatch-Boat."[26] In addition, in 1888 the American Society of Naval Engineers began producing the annual *Naval Engineers Journal.*

Officers and naval engineers also wrote articles for the *United States Army and Navy Journal and Gazette of the Regular and Volunteer Forces* and occasionally for such popular magazines as *Harper's, North American Review,* and *Scribner's.* The authors frequently described recent advances in international naval technology, publicized the obsolescence of American ships and policy, and advocated modernization. Their demands reflected concern about armored warship production overseas since the Civil War and about the traditional American naval strategy of commerce raiding, which they perceived as obsolete. In 1880 Lieutenant Charles Belknap recommended a class of "offensive, sea-going, armored [men]-of-war" capable of "carrying the war into an enemy's country."[27] Writing anonymously that same year in *The United Service,* another officer noted that "we should not forget that naval wars must hereafter, as heretofore, be decided by fleet engagements."[28] In an 1889 essay entitled "Our Future Navy" written for the *North American Review,* Rear Admiral Luce presented a forceful argument for fleet tactical development and battleship construction.[29]

The drive to improve the post–Civil War fleet began in earnest during the administration of William H. Hunt, Secretary of the Navy from 1881 to 1882. Two of his most noteworthy initiatives were the establishment of the first Naval Advisory Board, in 1881, and the founding of the Office of Naval Intelligence, in 1882. Formed at the urging of Bancroft Gherardi, then a captain eager to rejuvenate the Navy, the first Naval Advisory Board set in motion a process that contributed (as will be discussed) to the eventual retooling of American navy yards from wooden to steel shipbuilding;[30] to the development of a group of highly skilled technicians, engineers, and scientists able to test, develop, and construct steel warships; and to the growth of a cadre of officers with the expertise to link naval production requirements and private industry. Hunt assembled the Board from line officers, engineers, and naval constructors to compile a report outlining the measures necessary to develop a modern American fleet. Once the Board had reached a consensus, Hunt could use its findings to convince Congress to fund naval expansion.

However, in the course of its deliberations the Board suffered a schism; it ultimately produced two conflicting reports, pitting officers and engineers against a group of conservative naval constructors. The majority document recommended the introduction of steel warships in an ambitious construction program.

The leading figures in the drive for steel were such line officers as Lieutenant M.R.S. Mackenzie, who first suggested that the Board recommend in its report the construction of steel warships, and engineers like Lieutenant Edward W. Very, an ordnance expert who had recently won the gold medal in the Naval Institute's essay competition.[31] These individuals savored the prospect of a revitalized United States Navy after it had suffered years of stagnation and international humiliation. In contrast, the minority report, filed by naval constructors John Lenthall, Theodore Wilson, and Philip Hichborn, and Civil War Engineer-in-Chief Benjamin Isherwood, advised the construction of ironclad warships and argued against the use of steel as a tradition foreign to American practice. Isherwood opposed steel because of the great debt that he (correctly) feared the federal government would incur by fostering the nascent American steel industry. Unlike their cadet-engineer descendants, these older naval constructors had been trained in the art of wooden shipbuilding and stood a smaller chance of making the conceptual leap to steel warship construction.[32]

Congress agreed with the Board's majority report and, by acts of 5 August 1882 and 3 March 1883, authorized Navy Secretary William E. Chandler to form a second Naval Advisory Board to oversee the construction of new warships. The secretary was, with this new Board's approval, to spend $1,300,000 to build four ships of war, sophisticated at least in comparison to the

". . . [Due] to the emphasis being placed on new naval technology 'the age is full of progressive ideas, and we must become accustomed to departures from old forms.'"

Civil War–era ships then constituting the bulk of the fleet. Because they were christened *Atlanta*, *Boston*, *Chicago*, and *Dolphin*, the new vessels became known as the "ABCD" ships. The ABCD project was the first naval construction program since the Civil War and the first to require domestically produced steel.[33] From that point on, American warships would be built of steel.

Hunt's second important initiative, the Office of Naval Intelligence (ONI), also helped make the 1880s pivotal in the development of a modern American navy. Established shortly before Hunt left office in 1882, ONI assigned its first naval attaché, Lieutenant French Ensor Chadwick, to England that same year. Appreciating the vital importance of intelligence on rapidly changing naval technology, the Senate confirmed his assignment as attaché six successive times, a record that still stands. Due to the nature of technical intelligence, Chadwick had to learn to be a naval engineer as well as a combatant officer in order to assess the value of information collected from Britain, France, and Germany. In addition to reports, documents, and other material items, he sent home "sextants, spyglasses, sounding machine dials, magnetic instruments, and maps of various

areas; copies of patents, drawings, specifications, and photographs of ships, shells, and guns; models of various kinds for display at the United States Naval Academy; and halyards, clinometers, steel castings, signal lanterns, anchors, volt and ampere meters, and binnacles."[34]

The Office of Naval Intelligence gave such young officers as Chadwick and, later, William S. Sims, an opportunity to participate in intelligence gathering and so to witness first-hand the technological developments taking place overseas. Foreign naval intelligence was critical to the Navy during this period of rapid mechanization, and attachés ensured its steady flow to Washington. This information kept the Navy abreast not only of technology but also the latest advances in personnel management, medicine, administration, and other matters.[35]

One result of the rapid broadening of professional horizons was that by the 1880s naval officers could no longer rely simply on their Academy education and the practical experience they might gain in the service. In addition to literacy in naval technology, they required continuing education to keep up with the latest tactical and strategic developments. In 1884, at the insistence of then-Commodore Luce, the Secretary of the Navy established the Naval War College at Newport, Rhode Island, to educate officers in the tactics of modern naval warfare. Luce had faced resistance from the old guard of veteran line officers. Bradley Fiske, who became an admiral just before World War I, was to recall that "Luce . . . [understood] what nobody else realized in our navy, *or in any other navy*, that naval officers as they grew older needed instruction in strategy, in addition to the instruction which their duties gave them . . . [and] had conceived the idea of establishing a naval war college. Despite covert sneers and loud guffaws, Luce succeeded in getting a few officers to see the light he saw."[36]

It was in the early courses at the Naval War College that one of the world's most important books on naval strategy originated. In the late 1880s Captain Mahan realized that there existed no naval equivalent to the numerous treatises on the art of war on land. Accordingly, he began to collect his own lectures on naval strategy as the basis of a textbook to use at the College. In 1890 *The Influence of Sea Power upon History, 1660–1783* appeared.[37] During the 1890s and the early twentieth century, the Naval War College, the Office of Naval Intelligence, and their champions were to become central in formulating and implementing American naval policy.

The promise of funding for the ABCD warships in the spring of 1883 brought on a surge of innovation and invention within the Navy Department. Fiske, one of the most technologically innovative figures of this period, led in this creativity. Beginning in the early 1880s, he obtained patents on sixty devices in areas including depth sounding, internal and external shipboard communications,

navigation, rangefinding, and gun direction.[38] Of the eighteen original submissions received by the second Naval Advisory Board for the design of the ABCD warships, most were suggested by naval personnel such as Rear Admiral Thomas O. Selfridge, Passed Assistant Engineer George W. Baird, and Passed Assistant Naval Constructor F.T. Bowles.[39] In 1884, Bowles also submitted a request to the Navy Department to establish the nation's first model ship basin, at a cost of $50,000; over ten years later, Congress finally funded this important tool for naval modernization, which determines the resistance of hull forms to water. Until recently, this model basin was named for the Navy's most famous naval constructor, Rear Admiral David W. Taylor.[40] Innovativeness was also reflected in the great number of articles concerning new inventions and designs published in the *Proceedings* and other Navy-related journals.[41] Rear Admiral Edward Simpson wrote to Senator Eugene Hale in 1884 that due to the emphasis being placed on new naval technology "the age is full of progressive ideas, and we must become accustomed to departures from old forms."[42]

In the interests of national defense and the Navy, officers and engineers actively participated in an interdependent relationship between the service and private industry. As executive officer of the steam frigate USS *Trenton*, the first American naval vessel equipped with electric lights, Lieutenant Commander Royal B. Bradford became an authority on the use of electricity on board ships. In his subsequent assignment as the Navy's first naval inspector of electric lighting, Bradford set such rigorous requirements for electrical installations that manufacturers developed better-quality apparatus and "Navy standard" became the benchmark of excellence for electrical work across the country.[43] In the ABCD program the Navy assigned engineers to oversee contract work at such firms as the Nashua Steel and Iron Works, Morgan Iron Works, and John Roach and Sons shipyard. The service continued this policy throughout the 1880s, as it relied increasingly on private contractors.[44] For example, it sent Lieutenant William Folger to the Gatling Gun Company and Simonds Rolling Machine Company, while Ira Hollis worked at Union Iron Works to supervise construction of the cruiser *Charleston*.[45] As a result of this arrangement, the Navy was able to set quality standards, reject substandard materials, and recommend measures to improve the products of contractors.

With the exception of those associated with Secretary Hunt, most of these developments occurred under the administration of Secretary Chandler, who served from April 1882 to March 1885. Chandler continued Hunt's programs and initiated many more intended to develop an American fleet prepared to enter the twentieth century. His insistence that heavy forgings and armor be manufactured domestically motivated Congress to establish the Gun Foundry Board in 1883. Its expertise helped provide the basis for the nation's steel-ordnance industry.[46] America's first high-velocity breech-loading rifles were

produced at the Gun Factory at the Washington Navy Yard during his tenure and were later installed on the ABCD warships. He also oversaw the founding of the Naval War College, encouraged the growth of the Office of Naval Intelligence, and expanded the use of naval attachés.[47]

The modernization and professionalization that occurred in the 1880s did not, however, find full expression in that decade. Even during Chandler's tenure, the "old salt" mentality—which held ground because officer promotion remained based strictly on longevity—still influenced the training of naval personnel and had an effect on the adoption of new technology. This old-guard view was manifest in numerous events of the time. For instance, in 1891 Commander Robley D. ("Fighting Bob") Evans threw overboard a prototype of Bradley Fiske's revolutionary rangefinder during its trial on board the USS

". . . [In] 1891 Commander Robley D. ('Fighting Bob') Evans threw overboard a prototype . . . rangefinder during its trial. . . . [It] was, Evans claimed, 'of no value on board ship.'"

Yorktown because it initially failed to live up to expectations—it was, Evans claimed, "of no value on board ship."[48] (Fiske was later awarded the prestigious Elliot Cresson gold medal by the Franklin Institute in Philadelphia for his rangefinder design.)[49] In 1893, three years after publication of his pivotal *Influence of Sea Power upon History*, Alfred Thayer Mahan was refused a request to be excused from sea duty to continue teaching and writing because "it is not the business of naval officers to write books."[50] In a similar vein, Civil War veteran and Admiral of the Navy David D. Porter argued for full sail power for warships into the late 1880s, despite calls by the second Naval Advisory Board and Secretary Chandler to discard sails and rely entirely on steam power because the masts and rigging interfered with gun operation and spare sails occupied too much space below deck.[51]

Lack of congressional funding also impeded the Navy's efforts to capitalize on new technology. From 1875 through 1881, successive Republican administrations could not count on support from the Democrat-controlled House of Representatives. The Republicans succeeded in authorizing the ABCD warships only after gaining control of the House and matching the number of Democrats in the Senate; however, the Democrats regained control of the House in December 1883, and when in February 1884 the Republican-dominated Senate introduced another naval construction bill the House shelved the measure.[52]

Notwithstanding, and despite intense political bickering during the 1880s, support for naval development grew, eventually becoming bipartisan.[53] After Democrat Grover Cleveland succeeded Republican Chester Arthur in 1885, the Democratic Congress did all it could to help incoming Navy Secretary William Whitney produce a modern navy. The Senate created the Select Committee on Ordnance and War Ships, while the House established the Commission on Ordnance and Gunnery. Congress authorized the Navy to equip its own yards to construct steel warships in competition with private contractors. By 1890 the Brooklyn and Norfolk navy yards, the first ones retooled for steel, were well into the construction of the second-class battleships *Maine* and *Texas*, respectively.[54] In an avalanche of legislation, Congress authorized the construction of thirty new naval vessels, a total of 99,276 tons, before Cleveland relinquished the White House to Republican Benjamin Harrison in March 1889.[55]

Renewed funding for naval construction in the 1880s not only spurred invention and innovation by naval personnel but encouraged American industrial expansion. By 1888 a domestic gun-cotton industry had emerged on both coasts and the once-frustrated ordnance manufacturer Benjamin Hotchkiss returned from Paris to establish a Connecticut plant to produce rapid-firing guns and self-propelled torpedoes.[56] Up until the early 1880s, the primary product of American steel had been extruded rail for the railroads, but beginning with the ABCD warship program the industry began to experience greater demand for rolled plate and armor.

By the time Secretary Whitney signed a multimillion-dollar contract with the Bethlehem Iron (later Steel) Company in 1887, strong ties had begun to connect American and European steelmakers, American government officials, and technically oriented naval personnel. This interdependence involved naval officers as industry advisors, federal funding for plant improvements, and negotiations between steelmakers and government officials.[57] Lieutenant Francis M. Barber facilitated the transfer of steelmaking technology between the firms of Schneider-Creusot of France and Bethlehem, while Lieutenant William H. Jacques was the middleman between Bethlehem and the Whitworth works of England. These officers became the exclusive agents of Schneider-Creusot and Whitworth when they returned from apprenticeships with the European steelmakers. Jacques supervised the construction of a new heavy steel forging plant for Bethlehem after studying Whitworth's facilities, eventually retiring from the service to work for the steel industry full time, as did others.[58] By the late 1880s, the production of steel warships had become a team effort: the Navy supplied the supervision and technical expertise, the federal government the funding, and the steelmakers the labor and raw materials.

Toward the end of the decade the "Old Navy" was dealt the *coup de grace* by a natural disaster in the South Pacific. In 1878 the United States had signed a treaty with a Samoan tribe for the right to use the harbor at Pago Pago as a coaling station. In 1878 the British and Germans signed similar agreements. Throughout the 1880s tensions increased as Germany tried to pressure the United States and Great Britain to leave the islands; in 1880 war nearly broke out. By March 1889, all three powers had warships present, at Apia, to protect their interests, three each for the Americans and Germans and one for the British. Just as war appeared imminent, a typhoon swept the islands; all of the German and American warships, including the steam frigate USS *Trenton*, sank or were driven ashore.[59] This tragedy increased American awareness both of the competitive world order and the need for modern warships. Samoa had simply confirmed that the Germans would employ any means at their disposal to add to their global empire. In addition, the failure of the U.S. Navy's most modern warship (*Trenton*) to gain the open ocean (as had the British steel cruiser, which survived) underscored the necessity of building a fleet of powerful, oceangoing warships.[60]

The naval modernization and professionalization that had commenced in the 1880s finally bore fruit in the next decade. In 1881 the United States Navy had ranked twelfth among the world's navies, behind those of Chile, China, and Denmark. As late as 1885, Mahan had referred to the fleet as a "Quaker navy," because it reminded him of the Civil War "Quaker guns," blackened wooden cylinders improvised to simulate cannons on under-armed naval vessels.[61] A year later, the House Naval Affairs Committee openly acknowledged the Navy to be inferior to those of the European powers as well as Brazil, Argentina, and Chile.[62] By 1896, however, the Navy Department ranked its fleet sixth in the world, behind only Great Britain, France, Russia, Italy, and Germany, and ahead of Spain.[63]

Growing public support, an expanding naval-industrial relationship, and increased calls for a blue-water policy combined with a professionalized naval service to lay the foundation for what came to be known as America's "New Navy." In 1889, newly appointed Secretary of the Navy Benjamin F. Tracy developed an expansive naval program that incorporated the theories of Mahan. Citing the Samoan incident as justification for his ambitious plan, Tracy asked for battleships as well as cruisers, and he advocated a fleet with an offensive capability.[64] The Naval Appropriations Act passed by Congress on 30 June 1890 marked a radical departure from previous naval legislation by authorizing three battleships, the USS *Massachusetts*, *Indiana*, and *Oregon*.[65] American naval policy had been transformed from a defensive role to an offensive one, complete with Mahanian strategy and capital ships. In his 1891 annual message to Congress, President Harrison captured the spirit of this transformation, which had occurred

over the preceding decade: "When it is recollected that the work of building a modern navy was only initiated in the year 1883, that our naval constructors and shipbuilders were practically without experience in the construction of large iron or steel ships, that our engine shops were unfamiliar with great marine engines, and that the manufacture of steel forgings for guns and plates was almost wholly a foreign industry, the progress that has been made is not only highly satisfactory, but furnishes the assurance that the United States will before long attain in the construction of such vessels, with their engines and armaments, the same preeminence which it attained when the best instrument of ocean commerce was the clipper ship and the most impressive exhibit of naval power the old wooden three-decker man-of-war."[66]

The 1880s, therefore, marked a transition between the "Old Navy"—dominated by conservative line officers and characterized by commerce raiding, wooden warships, and such age-old traditions as sail training—and the "New Navy," led by a younger generation of progressive officers and engineers, and incorporating Mahanian policy, steel warships, and technically trained enlisted men. As naval rejuvenation advanced throughout the decade, modernization of its fleet and the professionalization of its personnel had become mutually reinforcing. The increasing specialization of enlisted men reflected this process. The period between 1880 and 1893 had seen the greatest number of rating changes of the post–Civil War era. Concomitant with changes in the enlisted ranks was an increase in the technical background of officers, which prompted Captain Alfred T. Mahan, then president of the Naval War College, to complain to the United States Naval Institute *Proceedings* that "it is now thought, practically, more important for a naval officer to know how to build a gun, to design a ship, to understand the strength of materials, to observe the stars through a telescope, to be wise in chemistry and electricity, than to have ingrained in him the knowledge of the laws of war, to understand the tactical handling of his weapons, to be expert in questions of naval policy, strategy, and tactics."[67] While this letter may have been in part an attempt to promote the Naval War College, then under budgetary siege by Secretary of the Navy William C. Whitney, it also shows how well known it was in the 1880s that technical expertise was becoming important to officers.[68] As with the many other American sectors in which nineteenth-century industrialization shaped change, the naval establishment was forced by rapid mechanization to adapt to a new technological reality.

However, while naval technology played a major role in influencing this transition, it was not the sole determining factor. When the service finally retired its antique wooden warships, with their broadsides of smoothbore cannon, and adopted modern warships, the seamen of the Old Navy had to be supplanted by

personnel with specialized technical backgrounds. Finally, modernization of the United States Navy was not entirely passive, not simply dictated by changing technology; individuals also had an important impact. A few forward-looking Navy secretaries and progressive officers, engineers, and naval thinkers of the post–Civil War generation (even before Mahan) openly supported technological development and an expanded role for the Navy. These progressives included Hunt, Chandler, Fiske, Luce, Bowles, Barber, and Jacques. They understood that their interests were best served through technical training and education, professionalization through associations and publications, increased funding for naval construction, and closer ties between the Navy Department and private industry. They played a major role in guiding the United States Navy through the transition of the 1880s into a new era.

Notes

1. For an early statement of this view, see Robert Seager II, "Ten Years Before Mahan: The Unofficial Case for the Navy, 1880–1890," *The Mississippi Valley Historical Review*, December 1953, pp. 491–512; idem, *Alfred Thayer Mahan: The Man and His Letters* (Annapolis, Md.: Naval Institute Press, 1977).

2. Seager, p. 512.

3. Robert G. Albion, *Makers of Naval Policy, 1798–1947*, ed. Rowena Reed (Annapolis, Md.: Naval Institute Press, 1980), p. 200.

4. For a more extensive analysis of American foreign policy during this period, consult Robert L. Beisner, *From the Old Diplomacy to the New, 1865–1900* (New York: Thomas Y. Crowell, 1975); Walter LaFeber, *The New Empire: An Interpretation of American Expansion, 1860–1898* (Ithaca, N.Y.: Cornell Univ. Press, 1963); and Harold and Margaret Sprout, *The Rise of American Naval Power, 1776–1918* (Princeton, N.J.: Princeton Univ. Press, 1939).

5. In the 1870s the Navy built 22,868 tons of wooden warships and 5,010 tons of iron warships. During the 1880s it authorized 149,596 tons of steel warships but no more wooden or iron construction. For details see 62nd Congress, 3rd Session, "Navy Yearbook: Compilation of Annual Naval Appropriation Laws from 1883 to 1912," *Senate Document 955*, 1912, pp. 764–5; and Frank M. Bennett, *The Steam Navy of the United States: A History of the Growth of the Steam Vessel of War in the U.S. Navy, and of the Naval Engineer Corps* (Pittsburgh, Penna.: W.T. Nicholson, 1896), Appendix.

6. W.T. Truxton (Capt., USN), "Reform in the Navy," *The United Service*, July 1879, pp. 378–82; and Charles Belknap (Lt. Cdr., USN), "Prize Essay of 1880: 'The Naval Policy of the United States,'" U.S. Naval Institute *Proceedings* [hereafter *Proceedings*], vol. 6, no. 14, 1880, pp. 375–91.

7. Frederick S. Harrod, *Manning the New Navy* (Westport, Conn.: Greenwood Press, 1978), pp. 191–2.

8. See, for example, Stephen B. Luce (Rear Adm., USN), "Naval Training," *Proceedings*, vol. 16, no. 55, 1890, pp. 367–96; "Discussion: 'Naval Training,'" *Proceedings*, vol. 16, no. 55, 1890, pp. 396–430; W.F. Fullam (Lt., USN), "The System of Naval Training and Discipline Required to Promote Efficiency and Attract Americans," *Proceedings*, vol. 16, no. 55, 1890, pp. 473–536; "Discussion: 'Captain Chadwick's Letter Relating to the Training of Seamen,'" *Proceedings*, June 1902, pp. 298–308; "Discussion: 'The Training Ship,'" *Proceedings*, June 1902, pp. 276–308; Victor Blue (Lt., USN), "Converted Yachts or Small Gunboats for Training Landsmen," *Proceedings*, June 1902, pp. 221–9; John Hood (Lt. Cdr., USN), "The School of the Officer," *Proceedings*, June 1902, pp. 195–206; and Charles Oscar Paullin, *Paullin's History of Naval Administration, 1775–1911: A Collection of Articles from the U.S. Naval Institute Proceedings* (Annapolis, Md.: Naval Institute Press, 1968), pp. 422–4.

9. For these "Young Turks," see Peter Karsten, *The Naval Aristocracy: The Golden Age of Annapolis and the Emergence of Modern American Navalism* (New York: Free Press, 1972), pp. 285–9, 298–300.

10. The relationship of rank and status between officers of the staff and line in the Navy of the Gilded Age is difficult to describe with precision. Engineers had their own ranks (third assistant, second assistant, and first assistant engineer, assistant and passed assistant engineer, chief engineer), as did naval constructors (assistant naval constructor, naval constructor, chief naval constructor). Engineers and naval constructors held commissions, but they were of inferior status to line officers of equal grade and seniority, especially on board ship. As

the nineteenth century drew to a close, rapidly changing technology influenced officers to become more technically inclined, as this article argues. The "cadet engineer" is one example of how the distinctions between officers and engineers were beginning to fade. It was not until Congress passed the Naval Personnel Act of 1899, however, that the line and staff ranks were merged and staff officers were granted rank, pay, and status on a par with the line. For the Naval Personnel Act of 1899, consult Karsten, pp. 355–6; Francis H. Wilson (Congressman), "The Reorganization of Naval Personnel," *North American Review*, vol. 167, 1898, pp. 641–9; Monte A. Calvert, *The Mechanical Engineer in America, 1830–1910* (Baltimore, Md.: Johns Hopkins Press, 1967), pp. 245–61; Elting E. Morison, *Men, Machines and Modern Times* (Cambridge, Mass.: MIT Press, 1966), pp. 98–122; Lance C. Buhl, "Mariners and Machines: Resistance to Technological Change in the American Navy, 1865–1869," *The Journal of American History*, December 1974, pp. 703–27; and Edward William Sloan III, *Benjamin Franklin Isherwood, Naval Engineer: The Years as Engineer in Chief, 1861–1869* (Annapolis, Md.: Naval Institute Press, 1965), pp. 189–212.

11. Jack Sweetman, *The U.S. Naval Academy: An Illustrated History* (Annapolis, Md.: Naval Institute Press, 1979), pp. 124–5.

12. *The National Cyclopedia of American Biography*, vol. 3 (New York: James T. White, 1893), pp. 282–3.

13. Thomas J. Misa, "Science, Technology and Industrial Structure: Steelmaking in America, 1870–1925," Ph.D. dissertation, Univ. of Pennsylvania, 1987, p. 69; Paolo E. Coletta, "The 'Nerves' of the New Navy," *The American Neptune*, April 1978, p. 123; Karsten, pp. 293–9; Elting E. Morison, *Admiral Sims and the Modern American Navy* (Boston: Houghton Mifflin, 1942), pp. 106–30; William Le Roy Emmet, *The Autobiography of an Engineer* (New York: The American Society of Mechanical Engineers, 1940), pp. 135–51; and Clark G. Reynolds, *Famous American Admirals* (New York: Van Nostrand Reinhold, 1978), pp. 317–8, 349–50.

14. Bennett, pp. 732–43; Calvert, pp. 50–1; Harold G. Bowen, *Ships, Machinery, and Mossbacks: The Autobiography of a Naval Engineer* (Princeton, N.J.: Princeton Univ. Press, 1954), p. 17; and John D. Alden, "Growth of the New American Navy," *Naval Engineering and American Sea Power*, ed. R.W. King (Baltimore, Md.: Nautical and Aviation Publishing, 1989), p. 36.

15. Consult Gail E. Farr and Brett F. Bostwick, *John Lenthall, Naval Architect: A Guide to Plans and Drawings of American Naval and Merchant Vessels, 1790–1894* (Philadelphia: Philadelphia Maritime Museum, 1991), pp. 37–46, for a bibliography of Lenthall's extensive collection of French shipbuilding sources.

16. Theodore D. Wilson (Naval Constructor, USN), "Education of Naval Constructors," *The United Service*, February 1880, p. 181. For further information on the late-nineteenth-century Naval Academy curriculum, consult James Russell Soley, *Historical Sketch of the United States Naval Academy* (Washington: U.S. Govt. Prinr. Off., 1876).

Naval Academy students, previously known as midshipmen, became in 1870 either "cadet midshipmen" or "cadet engineers," earning the rank of midshipman only after four years. In 1882, as part of an effort to reduce friction between the engineering and line communities, Congress combined the two Academy categories into one, "naval cadet." The title of midshipman was restored in 1902. See Sweetman, pp. 103, 116–7, 149.

17. 45th Congress, 2nd Session, "Report of the Secretary of the Navy," *House Executive Document 1, Part 3*, 1877, pp. 18, 275; 46th Congress, 2nd session, "Report of the Secretary of the Navy," *House Executive Document 1*, Part 3, 1879, p. 310; see also Wilson, pp. 180–9.

18. U.S. Office of Naval Intelligence [hereafter ONI], *The United States Navy as an Industrial Asset: What the Navy Has Done for Industry and Commerce* (Washington: U.S. Govt. Prinr. Off., 1923), pp. 95–6.

19. ONI, pp. 10–1; and Reynolds, pp. 349–50.

20. Karsten, pp. 293–9; and David B. Tyler, *The American Clyde: A History of Iron and Steel Shipbuilding on the Delaware from 1840 to World War I* (Newark, Del.: Univ. of Delaware Press, 1958), p. 93.

21. "United States Naval Institute, 1873–1891: Origin, Progress, and Object," *Proceedings*, vol. 16, 1891, Appendix (iii). For an insightful history of the Naval Institute, consult William Ray Heitzmann, "The United States Naval Institute's Contribution to the In-Service Education of Naval Officers, 1873–1973," Ph.D. dissertation, Univ. of Delaware, 1974.

22. Edwin T. Layton, Jr., *The Revolt of the Engineers: Social Responsibility and the American Engineering Profession* (Baltimore, Md.: Johns Hopkins Press, 1986), pp. 35–7; and Calvert, pp. 46–9, p. 259.

23. Alden, p. 36. Established in 1893 by naval constructors Francis T. Bowles, David W. Taylor, Washington L. Capps, Lewis Nixon, and Richard M. Watt, the Society of Naval Architects and Marine Engineers provides another example of a professional association organized and influenced by naval personnel. For more information see The Society of Naval Architects and Marine Engineers, *Historical Transactions, 1893–1943* (Westport, Conn.: Greenwood Press, 1945), pp. 538–44.

24. Francis T. Bowles (Assistant Naval Construcror, USN), *Ships of War* (New York: A.J. Johnson, 1885); and J.W. King, *The War-Ships and Navies of the World, 1880* (Annapolis, Md.: Naval Institute Press, 1881).

25. A journal incorporating articles concerning the results of experiments, technical articles, and descriptions of new Navy-related inventions and designs, the *Proceedings*' volumes generally surpassed five hundred pages during the 1880s.

26. Wilson, pp. 180–9; C. Sleeman, "The Employment of Quick-Firing Six-Pounder Shell-Guns for the Naval Service," *The United Service*, December 1884, pp. 573–84; and F.M. Barber (Lt. Cdr., USN), "The Most Efficient Battery for a Dispatch-Boat," *The United Service*, August 1885, pp. 129–47.

27. Belknap, p. 386.

28. A Junior Officer [pseud.], "Naval Reorganization," *The United Service*, September 1880, p. 466.

29. Stephen B. Luce (Rear Adm., USN), "Our Future Navy," *Proceedings*, vol. 15, no. 51, 1889, pp. 541–52.

30. Caspar F. Goodrich, "The Founding of the New Navy," *Proceedings*, June 1918, pp. 1267–8.

31. Robley D. Evans, *A Sailor's Log: Recollections of Forty Years of Naval Life* (New York: D. Appleton, 1908), p. 230; and Leonard Alexander Swann, Jr., *John Roach: Maritime Entrepreneur* (Annapolis, Md.: Naval Institute Press, 1965), pp. 154–64; and E. W. Very (Lt., USN), "The Type of (I) Armored Vessel, (II) Cruiser, Best Suited to the Present Needs of the United States," *Proceedings*, vol. 7, no. 15, 1881, pp. 43-83.

A Naval Advisory Board member, Evans claimed to have first introduced the notion of steel warship construction, but according to Swann the records show Mackenzie to be the one who first mentioned it.

32. 47th Congress, 1st Session, Report of the Board, "Report of the Secretary of the Navy," *House Executive Document 1, Part 3*, 1881, pp. 38–46.

33. 62nd Congress, 3rd Session, "Navy Yearbook: Compilation of Annual Naval Appropriation Laws from 1883 to 1912," *Senate Document 955*, 1912, pp. 3–4, 11–2.

34. Paolo E. Coletta, "French Ensor Chadwick: The First American Naval Attaché, 1882–1889," *The American Neptune*, April 1979, pp. 126–41, provides a wonderful description of Chadwick's intelligence-gathering activities and the early days of ONI. The quote can be found on p. 133.

35. Ibid.

36. Bradley A. Fiske, *From Midshipman to Rear Admiral* (New York: Century, 1919), pp. 106–7. (Emphasis original.)

37. A.T. Mahan, *The Influence of Sea Power upon History, 1660–1783* (Boston: Little, Brown, 1890). For a fuller description of Mahan's important work, see Stephen Howarth, *To Shining Sea: A History of the United States Navy, 1775–1991* (New York: Random House, 1991), pp. 236–7.

38. Coletta, "'Nerves' of the New Navy," pp. 123–4; and Karsten, p. 298.

39. Robert W. Shufeldt to William E. Chandler, 31 January 1883, "Report of the Naval Advisory Board, 1882–1884," box 1, RG 45, National Archives.

40. Francis T. Bowles to William E. Chandler, 17 April 1884, "Report of the Naval Advisory Board, 1882–1884," box 4, RG 45, National Archives; and ONI, p. 97.

41. See note 25.

42. 48th Congress, 1st Session, "Appropriations for the Navy," *Senate Report 405*, 1884, p. 4.

43. Fiske, pp. 84–5.

44. Swann, pp. 191–9; and ONI, p. 48.

45. Karsten, p. 176.

46. Benjamin Franklin Cooling, *Gray Steel and Blue Water Navy: The Formative Years of America's Military-Industrial Complex, 1881–1917* (Hamden, Conn.: Archon Books, 1979), pp. 41–6.

47. Leon Burr Richardson, *William E. Chandler: Republican* (New York: Dodd, Meade, 1940), pp. 307–15; Paullin, pp. 398–407; Cooling, pp. 52–3; Walter R. Herrick, Jr., "William E. Chandler," *American Secretaries of the Navy*, ed. Paolo E. Coletta (Annapolis, Md.: Naval Institute Press, 1980), pp. 398–402; George F. Howe, *Chester A. Arthur: A Quarter-Century of Machine Politics* (New York: Frederick Ungar, 1935), p. 238; and Thomas C. Reeves, *Gentleman Boss: The Life of Chester Alan Arthur* (New York: Knopf, 1975), pp. 345–8.

48. Edwin A. Falk, *Fighting Bob Evans* (New York: Jonathan Cape and Harrison Smith, 1931), p. 167.

49. Fiske, pp. 170–2; Elting E. Morison, "The War of Ideas: The United States Navy, 1870–1890," *Harmon Memorial Lectures in Military History*, no. 11 (Colorado Springs, Colo.: U.S. Air Force Academy, 1969), p. 7; idem, "Inventing a Modern Navy," *American Heritage*, June/July 1986, p. 153; Falk, p. 167; and Coletta, "'Nerves' of the New Navy," p. 125.

50. Howarth, p. 237, where the quotation (by Commodore Francis M. Ramsay) may be found.

51. 48th Congress, 1st Session, "Additional Steel Vessels," *Senate Report 161*, 1884, pp. 85–6; 48th Congress, 2nd Session, "Report of the Secretary of the Navy," *House Executive Document 1, Part 3*, 1884, pp. 41, 229; Harold and Margaret Sprout, p. 195; Morison, "War of Ideas," p. 2; and Swann, p. 89.

52. Richardson, p. 298–9; and Swann, p. 190.

53. Seager, pp. 497–8.

54. The Society of Naval Architects and Marine Engineers, pp. 17-20. "Second-class" was an official rating of armament.

55. 62nd Congress, 3rd Session, "Navy Yearbook: Compilation of Annual Naval Appropriation Laws from 1883 to 1912," *Senate Document 955* , 1912, pp. 760–76; Donal James Sexton, "Forging the Sword: Congress and the American Naval Renaissance, 1880–1890" Ph.D. dissertation, Univ. of Tennessee, 1976, pp. 140–51; Paullin, pp. 58–65; George T. Davis, *A Navy Second to None: The Development of Modern American Naval Policy* (Westport, Conn.: Greenwood Press, 1940), pp. 44–7; Walter R. Herrick, Jr., *The American Naval Revolution* (Baton Rouge, La.: Louisiana State Univ. Press, 1966), pp. 33–8; and Mark D. Hirsch, *William C. Whitney: Modern Warwick* (New York: Dodd, Mead, 1948), pp. 335–6.

56. John G.B. Hutchins, *The American Maritime Industries and Public Policy, 1789–1914* (Cambridge, Mass.: Harvard Univ. Press, 1941), p. 458; and Cooling, p. 77.

57. Hutchins, p. 458; and Misa, pp. 66–7.

58. ONI, pp. 37–9, 98–9; Misa, pp. 77–83; Cooling, pp. 69–74; and Karsten, pp. 176–7.

59. For this disaster see Robert Louis Stevenson, *A Footnote to History: Eight Years of Trouble in Samoa* (London: Cassel, 1892), pp. 244–67; Edwin P. Hoyt, *The Typhoon That Stopped a War* (New York: David McKay, 1968); and Donald W. Mitchell, *History of the Modern American Navy, from 1883 through Pearl Harbor* (New York: Knopf, 1946), pp. 39–40.

60. LaFeber, pp. 122–3; Beisner, pp. 68, 86; Sprout, pp. 206–7; and Mitchell, pp. 40–1.

61. Alfred T. Mahan, *From Sail to Steam: Recollections of Naval Life* (New York: Harper and Brothers, 1907), p. 197.

62. 49th Congress, 1st Session, "Increase of the Naval Establishment," *House Report 993*, 1886, p. 7.

63. 51st Congress, 1st Session, "Report of the Secretary of the Navy," *House Executive Document 1, Part 3*, 1889, p. 3; 54th Congress, 2nd Session, "Report of the Secretary of the Navy," *House Document 3*, 1896, p. 9; Mitchell, p. 27; and Walter R. Herrick, Jr., "William H. Hunt," *American Secretaries of the Navy*, ed. Coletta, p. 392.

64. 51st Congress, "Report of the Secretary of the Navy," p. 36.

65. 62nd Congress, 3rd Session, "Navy Yearbook: Compilation of Annual Naval Appropriation Laws from 1883 to 1912," *Senate Document 955*, 1912, pp. 755–65.

66. James D. Richardson, ed., *Messages and Papers of the Presidents, 1789–1897*, vol. 9, 1889–1897 (Washington: U.S. Govt. Print. Off., 1898), p. 200.

67. Alfred T. Mahan, "Letter of Captain A.T. Mahan [27 November 1888]," *Proceedings*, vol. 15, no. 48, 1889, p. 58.

68. Stephen B. Luce (Rear Admiral, USN), "The U.S. Naval War College," *Proceedings*, June 1910, pp. 566–7.

Ψ

Manufacturers, as well as sailors, proceed from a redundancy of inhabitants.

William Grayson of Virginia, 1787

Being on a ship is being in a gaol, with the additional possibility of being drowned.

attributed by Boswell to Samuel Johnson

The Changing Status of American Society and a View to the Future

Claire L. Gaudiani

I WANT TO SHARE WITH YOU SOME THOUGHTS in pursuit of democratic civil society because each of us needs to acknowledge our personal responsibility to the future well-being of this democracy. Whether we are in uniform or not, whether we are thirty or fifty or seventy, regardless of gender, race, or national origin, you and I are responsible together for the well-being of an extraordinary dream. To a great extent this dream has already been paid for by people who took it very seriously. Sometimes I feel that members of my own generation fuss too much about how things ought to be, not realizing that in many ways past generations had it much tougher than we do. I will advocate here that we rethink our responsibilities to our democracy, that we re-understand where we are in the struggle to make this democracy work, and that we recommit ourselves with the same energy that our founding fathers used to construct the documents that guide us. That is the same kind of energy that soldiers have expended on battlefields in New England, and from Antietam to foreign shores; they were struggling to preserve this ideal of life in a democratic civil society, and our work needs to be seen in that light.

Dr. Gaudiani graduated Phi Beta Kappa from Connecticut College in New London and received her master's and doctoral degrees in French from Indiana University. She has been Acting Associate Director of the Joseph H. Lauder Institute for Management and International Studies and also the Associate Director of the National Resource Center in International Management, both at the University of Pennsylvania. A frequent lecturer and author, she is consulted and quoted by professional organizations, network news, and the *New York Times*. In 1988 Dr. Gaudiani became president of Connecticut College, where she has built a national reputation for participatory strategic planning, institution-building, and advocacy of global civic virtues.

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Let me begin in an international frame. A few years ago I was flying home from Tokyo, and the person sitting next to me said, in halting English, "Madam, may I ask you a question?"

"Why, of course."

"You are American?"

"Yes, I am."

"I was thinking that your country is full of very different people, from many different parts of the world. You have many different religions, many different races. Tell me, what is it that holds you together as a nation?"

Although I had not realized it until that moment, the answer is so simple. What holds us together is a set of texts. We are a country, I explained to him, that is held together not by our personal ethnic connections but by an idea that we share. I said that Americans have been willing to die for an idea, the idea that is contained in those documents, one of them beginning, "*We the People of the United States, in order to form a more perfect Union. . . ,*" another with the line: "*. . . that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty and the pursuit of happiness.*" You and I know these words, but maybe we don't say them to each other often enough.

I explained to this man that on the block on which I lived in Philadelphia, in the inner city, no two families were of the same race, the same background, the same religion, or the same economic level. We were a city block of Americans. I said to him, "I would cheerfully lay down my life if it were necessary to protect my fellow citizens' rights under the Constitution, the Declaration of Independence, and the Bill of Rights. I believe that my fellow citizens would do the same thing. That's how we're a country."

"That's very interesting. Are there any other countries that have ever been made like this?"

"We were the first country to be made like this."

It was a provocative experience for me, because I realized that even I—an academic who had been teaching and doing research, working in the academic and corporate sector at the Wharton School, the daughter of a West Pointer who was shot down and put in prison camps at the end of the Second World War—that I myself had not really encountered that truth as deeply as I should have, as a citizen.

Our documents create for us a framework for two important qualities in our democracy: moral coherence and social cohesion. Moral coherence is what we believe together; and what we believe together as citizens is in those documents. Social cohesion is what we do together as citizens about what we believe.

Moral coherence and social cohesion—these two elements play themselves out in three different sectors in a democracy. One is the family, where these

values are transmitted. Another, farthest from the individual, is the government, where what we believe and what we do about it is worked out in law. But in that great open space between my family and my government is civil society: the welter of associations, organizations, and institutions in which citizens live out their personal and professional lives. It's the Rotary, the Chamber of Commerce, Kiwanis, and the Lions; it's the businesses people work for; it's media; it's churches and synagogues; it's bowling leagues and Little Leagues. It's all the places where we do our volunteer work; it's the community foundations; it's the United Way.

Civil society—we take it for granted now in America. But try to find it anywhere else in the world at the same level of health it has in this country. It is very tough to do. France is a great country; it has worked for five hundred years to develop its civil society. But because of the strong organizing power of

"We are each the guarantor of each other's rights. It is not the government that sustains our rights. It is We the People, it is civil society."

the monarchy, civil society in France had a great deal of trouble, and still does, in shaping and framing relationships. The same is true for Italy and for China.

Civil society is the place where democracy is sustained; what we are experiencing today, I believe, is a destabilization of moral coherence and social cohesion in our civil society. There is no more important work we can do now than address that.

We are about the task of making a modern democratic civil society continue to function in this country. This work began with one of the documents I mentioned, which quickly created the task of "settling ideological space." In that very early period a war had to be fought for the right to operate with this ideology rather than that of a monarchy; our founding fathers, the Revolutionary War heroes and the New England citizens who gave birth to this democracy even before it had documents, were settlers of what I call ideological space. True, settlers had come to this land before, and they had settled geographical space. Whether they came in Pilgrim ships or slave ships, whether they organized themselves as burgesses or tribal councils, they were settling the geography of this land. The very first pioneers, settling geographical space, were then followed by ideological pioneers, who settled the space defined by the ideology of those documents.

Soon we felt a moral coherence around those words I spoke to you, but people began to see a disconnect between those words and slavery. The abolitionists arose, and the nineteenth century was marked by the bitter Civil War. It moved us forward in the political framework to assure that our ideology

was going to live in the law—because when those words were written, they were a goal, not yet the law. The third wave of pioneers, then, were the settlers of *political* space. The Civil War was fought, and it was followed by the efforts of the suffragists to bring women "to the table" as full citizens.

Many years later, in the early sixties we did another major piece of work. It was not only truly to welcome our African-American brothers and sisters and people of color to the professions, to graduate schools, to medical, law, and business schools, into the armed services in larger numbers, and, very importantly, to the ranks of extended opportunity. That struggle was still to make the political framework sustain the ideology. We were finishing the settling of political space, which meant getting "all men are created equal" to mean *all* men and women, of all colors, whether or not they are property owners, regardless of their religion—and all participating in democratic civil society. The political "table" is not flawless yet, but consider: before the law, disabled people are there too.

I would say to you that the next task is just now before us. The political work of settling our ideological space has been done. Our work as citizens right now is to settle *psychological* and *social* space in civil society. We have to figure out what to do, now that everybody is at the table. What kind of expectations can we have of each other? What kinds of guarantors can we be of each other's rights? What kind of practitioners of civic virtues do we have to be?

In our democracy we have a social contract, and the social contract is built on two pillars. One is the pillar of rights, and the other is the pillar of virtues. We have no rights that are not attached to civic virtues. My right to free speech, when I am a minority of one, is dependent on your willingness to practice the civic virtue of tolerance; if you decide, as a majority, not to practice it, you can pass laws that deny me free speech. All my rights in the whole Bill of Rights are linked to your willingness as a majority to practice the civic virtues. When I stand with you in the majority and someone else is the minority of one, you need to know that you can count on my tolerance, charity, integrity, and honesty—the civic virtues that Jefferson and Franklin wrote about. You need to know that I will practice them just as vigorously as you in order to defend the rights of another of our brothers and sisters.

We are each the guarantor of each other's rights. It is not the government that sustains our rights. It is We the People, it is civil society. Our families might defend us whether we are right or wrong, but in civil society the rights that we are assured come from the guarantee of fellow citizens to practice civic virtues. I say rights and virtues, not "rights and duties" or "rights and responsibilities"; responsibilities and duties are what we do after we know we are guarantors, practitioners of civic virtue: we become tolerant, charitable, frugal, and honest. We call ourselves to *be*, and out of that being comes the commitment to *doing*.

This is the relationship between moral coherence and social cohesion: being and doing. This social contract among citizens in civil society and in democracy is all that will sustain us. If we sustain that, it is all we will need.

But the rest of the world is looking at us. What song were they singing in Tienanmen Square—do you know? What song were they singing when the Wall came down in Berlin? What song were they singing that night in front of the Russian White House when four young people were killed? They were singing "We Shall Overcome"—yes, they were singing our song. They were thinking not just about what we have in this extraordinarily wealthy country, not just what we can do with what we have; they were thinking about who we are. They want to overcome what they are struggling with. They know we have had a fight, a struggle, and they are willing to align themselves with that struggle.

We know very well we have not got it right yet, that it is not perfect here; our cities, our suburbs, our young and our old know the struggles we have had. We know that since Watergate particularly we have had a series of disappointments at the ethical level, from leaders in all ranges of responsibilities. Whether it be Ivan Boesky and his colleagues on Wall Street, or college presidents, or members of the clergy or the military or politicians, none of us who breaks the civic virtues does it in isolation. High technology gives us information about each other. We fracture something critical in the trust that members of civil society should share. Democracy is in danger every time civil society is hurt like that.

We have struggled with modernism; we have struggled with restructuring corporations, where people with long-standing expectations for continuous employment have been shuffled and "downsized." We have watched a proliferation of well-meaning laws, rules, and regulations; we have perhaps abused law

". . . [What] we are experiencing today, I believe, is a destabilization of moral coherence and social cohesion in our civil society. There is no more important work that we can do now than address that."

as some people abuse rights. We have also abused law by forgetting that not everything can be legislated: we try to make the law make us ethical when there is an extraordinary difference between what is legal and what is ethical and moral. We have seen the rise of drugs and violence and the disintegration of the family. Modern society and the strong organizing, systematizing forces that have made things so very efficient have taken us away from spending time with each other in civil society, in some cases even inside the family.

We have had our difficulties, these last thirty years. As I talk about reinvigorating civil society, do not think for a moment that I don't understand this. Yet

this great economy, this great military, and the profound idea of democracy have brought us to a moment when all over the world people want something like what they see here: the right to vote, a civil society, a free and open market, and opportunity for one's children.

I believe that the task before us now in settling psychological and social space can be done if we understand that we must balance the strong forces of modernism with some of the forces of *pre*-modernism. Francis Fukuyama defines modernism as the efficiency that optimizes, systematizes, and rationalizes structures that organize modern life.[1] These forces have given us an enormous power in the world and in our own country. But they have perhaps reached the end-point of their ability to contribute to the making and remaking of America unless they are augmented by certain forces which Fukuyama calls "pre-modern," which organized and structured human society before the Enlightenment. In general, these are structures that are built on faithful relationships, long-lasting relationships. The guild system, where a person went through apprenticeship and journeyman levels and then on to be a master, is an example of such a structuring force, one that worked very well and in certain areas continues to organize expertise.

Today we have "expert systems" on our computers, and we make people experts in many different ways. But we need in civil society to remember the importance of relationships. While it goes without saying that no pre-modern society gave people the opportunities to express their individual giftedness with the security that a modern democracy does, we have become so busy that we cannot spend much time in faithful relationships.

Institutions of higher education traditionally use a number of pre-modern organizing principles; colleges and universities are a model of connections between modern and pre-modern life. You have seen academic processions, dressed in brightly colored, funny outfits that have been worn in higher education for about a thousand years: they are an outward sign of the inward grace of those longstanding relationships. Young faculty start out as graduate students, apprenticed to graduate faculty; then they go on to their first jobs, where they become journeymen. When they present themselves for tenure, if they are accepted by the senior faculty they become masters—just like the old system. We tend to choose our academic leaders, our presidents, from the faculty, so that we are led by a "family member," who has a longstanding, faithful relationship to the institution.

Robert Putnam has argued that our busy-ness weakens democracy. In *Making Democracy Work* he urges us to look at our schedules and decide, quite purposefully, to strengthen democracy by setting aside time for rebuilding civil society through personal involvement in faithful relationships.[2]

I challenge my colleagues in higher education to be much more explicit models of this synergy between modernism and pre-modernism, because to have all races, both genders, different national origins, and different levels of physical ability and economic achievement work well together means that we have to spend time together. We need to understand what our African-American brothers were saying when they went to the Million Man March. We need to understand the frustration of people like the African-American computer analyst who recently said, "Sometimes I feel foolish. I was here as a boy, listening to Martin Luther King call for a time when all little children would be valued together. I've lived that dream, but [my experience does not] define the mind of America about African American men." This is a moment for us to say, "I should have been there to know him. He should have been able to tell me at the Rotary or at a bowling team meet. I should have been able to understand, so I could have told others." Things should have changed before that man felt trivialized by the commitment he made to an ideal that we summoned him to, one that those documents and 220 years of ideological and political struggle have called him to accept as a personal responsibility.

"Our great-grandchildren could say, 'You were wrong! Couldn't you see what was happening in the late nineties? Didn't you understand that you had a chance. . . ?' What will we tell them?"

You and I as Americans have to "own" the experience of our brothers and sisters: whether they be African-Americans, or descendants of people who came over on the *Mayflower*, or those who arrived five or ten or fifteen years ago. We are one people, with an ideology that connects us. That dream has been moved along at great sacrifice for a long time. There is no reason why our own experience as pioneers should be easier than that of the pioneers who struck out to settle this land; why our time should be easier than that of those who struggled through the Revolutionary War and the rise of this country, or the days of abolition and the Civil War, or through the century and decades since then? Why should our time be easier? Why are we amazed that we have struggles?

You and I celebrate that in our country we have done a great deal and that we can hear each other. All that stops us from achieving a new level of interaction in this rich civil society is making time for each other. The time we spend with each other, trying to understand each other's needs and each other's children's hopes, will be like that which other pioneers had. We will be settling, making comfortable life happen, in the social space that democracy offers us. We will be settling psychological space.

It has not been easy for men to make space for women in many of the professions. We've had to remind you from time to time when things have been disappointing. But almost fifty percent of the graduate, medical, law, and business school students this year are women. That is an extraordinary change in a period of thirty or thirty-five years; it wasn't true when I graduated in 1966. So we have been settling psychological space at the boardroom table, at the operating table, at the meeting and conference room table. We are getting better at it, though there are mistakes. We need to spend time settling psychological and social space so that civil society in this democracy can continue to flourish.

I want to conclude with Robert Putnam's recent study of the rise of democracy in Italy. He began his research with the assumption that the wealthy provinces developed strong civil society, democratic principles, the arts, humanities, education, research, and technology—and so built the Renaissance. That sounds right: if you have the wealth, you can do these things, because you are not scrabbling for everyday existence. But the evidence showed him that it is wrong. It was the provinces that developed strong civil society which produced wealth, and out of that wealth came the universities, the arts, research, and technology. These provinces developed strong civil society, firm trust, and faithful relationships outside the family *and* outside the government. The place where civil society got strong was among the citizens, and the provinces where that happened became wealthy.

Now, you as an American might say, "We're not in Italy—this country has always had a strong civil society—none of that has anything to do with us." But what if you are wrong? What if we let civil society weaken and we stop caring? Will we need higher walls, more guards? We can do that—but for how long? And what kind of a democracy would we become? Fifty years from now our great-grandchildren could say, "You were wrong! Couldn't you see what was happening in the late nineties? Didn't you understand that you had a chance? You saw militias putting themselves together, and people who felt that they couldn't be heard and were distrustful of their government and each other. You saw wealthy people shutting themselves off into more exclusive communities, not engaging. What were you thinking about?" What will we tell them?

I think we cannot take a chance. We cannot just keep building a bigger economy and hope it doesn't matter whether we sustain civil society. When recently the citizens of Orange County, California, voted to default on their municipal bond debt, I saw that something important is happening in my country. It is not just happening in the ghetto, not just with people who are shooting-up drugs—it is happening with people who have options. They have lost the moral attachment to the civic virtue of honesty. If we abandon common commitment to debt repayment, what do we think will happen to a capital market economy? Are we losing moral coherence? I think so.

When I talk about civic virtue, am I an academic with her head in the clouds? Maybe, but maybe not. Maybe these old-fashioned civic virtues are a piece of what we need, all of us, in this great democracy: because our prosperity depends on the strength of our moral coherence and social cohesion. Indeed, our "job description" as citizens who have the privilege of living in America is to contribute to the civil society upon which our 220-year experiment in self-government rests.

Notes

1. Francis Fukuyama, *Trust: The Social Virtues and the Creation of Prosperity* (New York: The Free Press, 1995).
2. Robert D. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton, N.J.: Princeton Univ. Press, 1994).

Ψ

The *Kata* of Japan's Naval Forces

Peter J. Woolley
and Commander Mark S. Woolley, U.S. Navy

JAPAN'S SELF-DEFENSE FORCES (SDF) HAVE been portrayed in circles both public and academic as timid and restrained—a decorative, high-tech appendage to an economic powerhouse. The SDF have been described, for example, as "reluctant samurai" and "wary warriors."[1] Among the many explanations offered for the low profile of Japan's military contributions to Western security, however, a significant factor has been overlooked: the *kata* factor.[2]

Japan seems to demonstrate in defense affairs, as in other areas of political and cultural behavior, a clear preference to act only after careful planning and rehearsal. *Kata*, or "form," is emphasized in every endeavor, in stark contrast to the American predilection for improvisation and innovation. This cultural generalization helps to explain the development of roles and missions for Japan's Self-Defense Forces and, in particular, the Maritime Self-Defense Force (MSDF).[3]

The MSDF has been steadily developing and perfecting new roles and missions for several decades. The cycle has been one of, first, incremental growth in capability; second, long practice; and finally, the performance of a new mission and public acceptance of it. The MSDF's sphere of activities, then, has been widening in a way that suggests not timidity but prudence, competence, and steady evolution. (See Figure 1.)

A Public Perception

Many factors explain what seems, as one prefers, the snail-like development or the slow but steady and sure rehabilitation of Japan's military forces. Among

Dr. Peter J. Woolley is associate professor of comparative politics at Fairleigh Dickinson University and was in 1995 an Advanced Research Scholar at the Naval War College. Commander Mark S. Woolley has served on several combatant ships in the Pacific and on the staff of Commander, Amphibious Group One, deployed to Okinawa; he is currently assigned to The Joint Staff.

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the influences bearing upon the pace of the SDF's evolution are constitutional constraints (specifically Article Nine), parliamentary legislation and resolutions regulating SDF activities, the relative inexperience of the Cabinet with regard to military means, and, finally, public preconceptions and apprehensions about SDF.[4] All of these are familiar and important, and each deserves amplification, but the relatively limited experience of the SDF should be added to the list; this factor is itself understandable given a cultural emphasis on *kata*.

Kata might also be translated as a model, pattern, mold, type, kind, style, example, usage, tradition, rule, formality, or formula. Some of these English words carry negative connotations in the West; many are even things that Westerners are traditionally encouraged to break (molds, patterns, rules, formalities, and formulae) or take satisfaction in replacing (forms, models, styles, types). The meaning of the Japanese expression *kata ni hamatta*—conventional, stereotyped, grooved, or manneristic—is likewise pejorative in the West. But it is not so in Japan: *kata ni hamaru*, to be in *kata*, is something to be proud of; *kata ni hamaranai*, to be in poor form, is definitely undesirable. To break form, *kata yaburi*, would be unconventional, unusual, extraordinary—all qualities problematic in Japan but in which the West tends to delight. The SDF has taken on new missions by breaking tradition only subtly and gently, by incorporating new roles neatly into past forms. Such advances take time, patience, and planning. If a new role is to be undertaken, it must be identified far in advance so that training can be arranged, experience acquired, and acceptance cultivated.

Of the three components of Japan's Self-Defense Forces—ground, air, and maritime—the Maritime Self-Defense Force has been perhaps the most energetic and self-confident, as well as the most cosmopolitan. Its ships have performed dangerous and highly skilled tasks such as minesweeping both in home waters and abroad, and by any international comparison the MSDF constitutes a substantial and impressively competent naval force. Its activities are also more conspicuous than those of its sister services. The most impressive elements of the Ground Self-Defense Forces (GSDF) are relegated largely to the thinly populated island of Hokkaido, whose principal city, Sapporo, is over five hundred miles from Tokyo. The GSDF's chief mission, as far as much of the public is concerned, has been civil defense, particularly in the event of earthquake.[5] Similarly, the Air Self-Defense Forces, though sophisticated and numerically sizeable, have kept a low profile, never having deployed warplanes overseas.[6] By contrast, the MSDF bases its ships near population centers and has conducted minesweeping in Japanese waters for many years.[7] It has made many trips abroad for training, conducted combined exercises with the U.S. Navy since 1955, and deployed to the Persian Gulf following the 1991 war for Kuwait.

Milestones in MSDF Development	
1948	Maritime Safety Force established
1954	Defense Agency established
1956	First naval warship produced domestically since WWII
1958	First overseas training cruise by MSDF
1965	First out-of-area dispatch for other than training: icebreaker *Fuji* dispatched to Antarctica
1980	MSDF takes part in RIMPAC exercises
1981	Japan agrees to take responsibility for the defense of sea lanes in one thousand–mile radius
1984	New class of fleet support ships authorized
1987	Japanese-flag vessels attacked in Persian Gulf; U.S. requests minesweepers; feasibility study conducted
1989	MSDF-USN joint minesweeping exercises begin
1991	MSDF minesweepers deployed to Persian Gulf
1992	SDF personnel in Cambodia supported by JDS *Towada*
1993	First *Kongo*-class DDG commissioned, displacing 7,250 tons and Aegis-equipped

Figure 1

It might be imagined, therefore, that were the MSDF not so severely limited by governmental views and public opinion in Japan and in the rest of the Asia-Pacific region, it would quickly expand its roles and missions. However, this is not necessarily true for any of the Self-Defense forces, even the maritime. In part, the climate of public opinion is influenced by what the Japanese people and government think the SDF can do; but roles and missions are also limited by what the SDF itself thinks it can do. Public opinion seems as much to follow the SDF as to limit it.[8] The process of change is cyclical, iterative, and interactive. A new mission taken on by the MSDF has already been planned and long rehearsed; public reaction is continually studied from mission conception through attainment of the capability. Eventually the mission is approved by the government, accepted by the public, and recedes into the everyday and ordinary background of public affairs.

Overseas Deployment of Forces

Let us consider as a first example how the MSDF has been dispatched overseas regularly for several decades even though it has been, and in some quarters still is, considered unconstitutional to do so. The MSDF in fact has never been a stay-at-home force; the Japanese public has gradually gotten used to that fact or overlooked it, and the MSDF has over the years led the way in sending forces abroad, first for training, then for other purposes.[9] How was this done?

In 1958 the Japanese Defense Agency (JDA) first announced it would dispatch ships overseas: four destroyers were being sent to Midway Island and Hawaii, including the 1,700-ton destroyer *Harukaze*, the first warship produced in Japan since 1945, as flagship.[10] This training mission did not go forward without objections that it violated the legislative resolution of 1954 defining the postwar limits of the new SDF.[11] But the government insisted that the prohibition of forces overseas did not preclude training missions; the argument carried, and the operations continued.[12] MSDF ships returned to Hawaii annually and, for good measure, visited the western coast of North America, stopping in Canadian ports in 1959 and Mexico in 1961. By 1963 they were venturing in the other direction as far as Western Europe, en route calling in Thailand, Egypt, and Turkey; by 1965 they had circumnavigated South America and called at ports in Colombia, Venezuela, Brazil, and Argentina; and in 1970 the MSDF visited Africa, making calls in Mozambique and Kenya. Despite the expansion of the training cruise year by year, objections grew fewer until they were only faintly heard; eventually the entire event became unremarkable, if not forgotten.[13] Meanwhile, officers and crews gained experience in operating as more than a local and coastal force.

Likewise, until 1965 Japan's Antarctic observation teams were transported and supplied by a vessel of the Maritime Safety Agency (MSA). In that year, however, the ship dispatched for this purpose was the MSDF icebreaker *Fuji*.[14] Because *Fuji* was not on a training mission, it was said, this cruise violated the prohibition against the dispatch of forces overseas. The government argued that it understood the constitution not to prohibit support of a peaceful, scientific mission. The regular deployment of MSDF icebreakers well beyond Japanese territorial waters soon became a routine event that, once again, was soon little noticed by the general public.

All of this suggests, very simply, that MSDF missions and their acceptance proceed together, gently and gradually, and that in this manner the service is able to develop its competencies and extend its range of activities, allowing the government to move on to the next concern. Sending MSDF ships outside the waters immediately surrounding Japan provided a basis for new roles—humanitarian and peacekeeping missions under United Nations auspices, and,

for the MSDF in particular, the defense of sea lanes out to one thousand miles and minesweeping in foreign waters.

Defense of Sea Lanes

The defense of sea lanes of communication within a thousand miles of Japan is another illustration of the way in which Japan's defense policy has evolved in step with the capacity of the Maritime Self-Defense Force. In other words, the capability and experience of the MSDF in sea control, including antisubmarine warfare (ASW), developed in tandem with the expanding national policy of defending sea lanes in the 1970s and 1980s. Some have argued that Japan has not been capable of assuming this new mission and that it has never met expectations of U.S. defense planners; nonetheless, Japan has eased into this role over several decades while developing the *kata* of sea lane defense.[15]

In 1971 the respected Japanese defense commentator Hideo Sekino declared in the U.S. Naval Institute *Proceedings* that Japan's defense priorities should be reordered: "The protection of the sea communications of Japan should be given first priority in the national defense of Japan, and the prevention of direct invasion of Japan should be made the secondary function of the maritime defense force of Japan."[16] According to Sekino, a *guerre de course* was the most likely kind of conflict, and in such a case "Japan must at least secure the sea communications north of Indonesia on her own."[17]

The former Imperial Navy officer was making neither an idle boast nor a plea to deaf ears. By 1971 the MSDF had acquired thirty-eight destroyers and frigates (as compared to the U.S. Seventh Fleet's inventory of forty-four). The MSDF also had a total of 180 maritime aircraft, primarily for antisubmarine warfare and patrol.[18] Late in 1977 the director general of the Defense Agency said publicly that Japan should defend "key transport lanes within 1,000 miles of Japan's coasts."[19] He could say this because, in part, the MSDF was embarked upon yet another building program. The National Defense Program Outline of 1976 called for sixty ASW ships, sixteen submarines, two minesweeping flotillas, and sixteen ASW squadrons comprising 220 aircraft.[20] In the 1970s the MSDF practiced the *kata* of refueling at sea and by 1979 had put into service a new fleet oiler and planned for an additional three fleet replenishment ships. Clearly the MSDF was expanding not only in numbers but in capabilities: both the oilers and the refueling skills were prerequisite for deep-water operations and sea lane defense.[21]

In 1981, Prime Minister Zenko Suzuki, after discussion with the Reagan administration, said that some new arrangement in security roles in the Northwest Pacific was desirable.[22] The prime minister was alluding to the idea that Japan should soon take responsibility for sea lane defense and allow U.S.

naval forces to concentrate on other roles and other areas of the Pacific. Only a year earlier the MSDF had first participated in RIMPAC exercises with the U.S. Pacific Fleet, contributing two destroyers. Thereafter, Japans participation in RIMPAC steadily grew; by 1984 the MSDF's commitment to this exercise comprised four destroyers, eight ASW aircraft, and a flag officer.[23]

The policy of sea lane defense within a thousand miles was all but official by 1983. Prime Minister Yashuhiro Nakasone—a former director general of the JDA—endorsed the notion of defending Japan's sea lanes "between Guam and Tokyo and between the Strait of Taiwan and Osaka."[24] The JDA's 1983 white paper included an explanation of this policy and its requirements; white papers thereafter simply listed thousand-mile sea lane defense as one of several roles of the SDF.

Some, especially in the U.S. government, still wondered whether the policy of sea lane defense was a hollow commitment, somewhat fanciful and embraced only to placate the Americans. But that is not the Japanese way. Between the time Suzuki suggested that sea lane defense was desirable and when Nakasone made it official, the MSDF had embarked upon an extensive upgrade of its long-range maritime patrol aircraft, a program that included the acquisition of more than forty P-3Cs, the latest version of the U.S. Navy's Orion. The surface force was planning a new class of destroyers with guided missiles and had begun an extensive modernization program for existing destroyers and frigates, involving the Harpoon and Sea Sparrow missiles as well as close-in weapon systems. By 1985 *Jane's Fighting Ships* could say, "This is a growing force which has improved greatly not only in numbers but in modernity over the last ten years";[25] the *Asian Defense Journal* assessed the MSDF destroyer fleet as "one of the most modern in the world."[26] At this point, by way of comparison, the U.S. Seventh Fleet had twenty cruisers, destroyers, and frigates, while the MSDF had thirty-one active destroyers in service, eight more being built, and eighteen frigates. In the rest of the decade, even as the Soviet threat receded, Japan continued to improve its capacity for sea lane defense.[27] Construction of Aegis destroyers, the *Kongo* class, began in 1990, making Japan the only U.S ally that has bought that superlative fleet air defense system.

U.S. defense analysts continued to debate to what degree the MSDF fulfilled its commitment to take over the thousand-mile sea lane defense, but it never was a hollow promise. Today, after the deterioration of the Soviet navy, and with American naval forces drawing down, the MSDF has emerged as a maritime force with both the equipment and the training to perform as promised and practiced for so many years.

The *Kata* of Minesweeping

A recent and interesting example of the *kata* of MSDF missions was the deployment of a flotilla of minesweepers to the Persian Gulf in April 1991, almost

immediately after the termination of hostilities in Iraq and Kuwait.[28] Much of the American public viewed this effort as too little, too late; others said it exemplified Japan's scant contribution to international security. However, the deployment of four minesweepers and two support ships was an astounding precedent in the use of the Self-Defense forces: never before had the MSDF been sent into such distant and potentially hostile waters. Moreover, the minesweepers were explicitly allowed by the Defense Agency to give "fuel, lubricants, fresh water and food" to coalition vessels in the Gulf, another milestone.[29]

How was it that the government, the Japanese public, and the MSDF were ready to accept the deployment of warships to the Persian Gulf in 1991?

The government's preferred military response to the Persian Gulf hostilities of 1990–1991 was to deploy a minesweeping flotilla—specifically because this was an action that the government had previously considered and a contingency that the MSDF had studied. Late in 1987, a year when oil tankers began to be subjected to attack from Iranian gunboats and mines, the United States had asked Japan to contribute to the international naval effort to escort reflagged Kuwaiti vessels. The Japanese government had considered the request, and the Maritime Staff Office began studies of the situation in case the Cabinet decided to grant the American request.[30]

Indeed, it had been a reasonable request—not because Japan owed some debt but because the MSDF then operated more than forty of the world's most modern mine warfare ships. It was reasonable also because Japan had been perfecting the *kata* of minesweeping for several decades—since, in fact, 1945, when its minesweepers began to search Japanese waters for mines sown during the world war. After the disbandment of the rest of the Imperial Navy, these minesweepers continued under the rubric of the Maritime Safety Agency. They were even called into service by the Americans at the start of the Korean War. In late 1950 several dozen Japanese ships cleared mines in Korean harbors, assisting an American navy that was woefully short of both minesweeping vessels and experienced crews—a situation not remarkably different from that of the late 1980s and early 1990s.[31]

Notwithstanding, the United States' 1987 request for minesweeping help, the first since the Korean War, was declined by the Japanese government. The difficulty lay less in the novelty of the request or the potential danger of the task than in the unfamiliarity of the Japanese public with this capability, along with the MSDF's inexperience in the region. Nonetheless, in 1988 two retired MSDF admirals went aboard U.S. escort vessels to observe the operation in the Gulf and report back as to whether Japanese participation might be feasible in the future. The admirals produced for the independent Strategy and Research Center in Tokyo an unofficial study that was circulated in the Diet, foreign ministry, and Maritime Staff Office.[32] The document concluded that an escort

mission could be undertaken by the MSDF in the Persian Gulf and explained how it could be successfully accomplished.

So it was that two years later, following Iraq's invasion of Kuwait, the MSDF had its 1987 studies on hand. Well ahead of its sister services in planning, experience, and in convincing the Cabinet that this mission could be carried out successfully, the MSDF began almost immediately to update and revise its plans.

By comparison, the Air Self-Defense Forces (ASDF) did not initiate contingency planning until early November 1990, some three months after the crisis began. (The Ground Self-Defense Forces began even later still and made only minimal gestures even then.) However, the ASDF eventually progressed far enough in their preparations to give the Cabinet realistic choices. ASDF pilots were on alert for several weeks in January and February 1991, when the Gulf war began in earnest. They were briefed by U.S. Air Force officers on air routes to the crisis region, procedures, possible dangers, and even desert survival techniques; pallets with food, spare parts, medicines, and other supplies were made ready to be loaded—if the orders came.[33]

In the end, orders did come—not for the ASDF, however, but for the MSDF. For the Cabinet, it was the logical choice: of the three branches of the SDF, only the maritime forces had substantial overseas experience, having been allowed for almost two decades to conduct distant training. Also, the government could favor the MSDF plans simply because it was more familiar with them and more confident in their prospect for success.[34] The plans were ready, the forces were ready, and the task was well rehearsed. Distant maritime operations were the next step in widening the circle of Japan's military activities.

By 1995, the Japanese Self-Defense Forces had been on missions to the Persian Gulf, Cambodia, Mozambique, and Zaire. The parliament had passed new laws explicitly allowing them to take part in United Nations operations, and several new competencies were being acquired.

Work had begun on an 8,900-ton amphibious landing ship designed to carry two air-cushion vehicles, a project that a few years earlier would have been thought too far beyond the notional limits of the service's missions and roles. Prime Minister Tomiichi Murayama, however, had explained that the "role the United Nations plays for peace and stability is extremely big" and that Japan would be taking a leading role in UN peacekeeping missions.[35] Therefore, Japan required new capabilities of its Self-Defense Forces. Those that involved the MSDF already existed in embryonic form. In 1992 it had supported a battalion of GSDF engineers in Cambodia, with two landing ships, as well as a fast combat support ship that made regular trips between Sihanoukville and Singapore.[36] That vessel, JDS *Towada*, had been commissioned in 1987 as the first of a new

class. Thus, sealift capacity and UN-related missions for the SDF developed together, maintaining "good form" at every step.

Escort missions are also part of an evolving capability and *kata*. Japan has twice been asked to aid in the safe passage of merchant shipping in distant waters and has itself suggested that it could help to police the pirate-ridden Straits of Malacca. Also, the MSA now regularly escorts the freighter *Akatsuki Maru*, carrying processed plutonium from Europe to Japan. The MSDF's addition of Aegis destroyers will not only increase its effectiveness in antiair and antisubmarine warfare but also enable it to operate outside the range of land-based aircraft in defense of merchant shipping.[37]

Criticism of Japanese foreign and domestic policies has been commonplace among the American public in the last decade. Largely unrecognized has been Japan's acceptance of new international responsibilities, the steady expansion of its military budget, and the ever-widening circle of missions planned and practiced by the Maritime Self-Defense Force. In 1945 it seemed implausible that within ten years the U.S. would be encouraging the re-formation of Japan's military forces. In 1970 few would have predicted that in ten years' time Japan would be responsible for protecting its sea lanes out to a thousand miles. Yet by the late 1980s the MSDF had become one of the most powerful maritime forces in the Pacific, and it had deployed overseas in support of (albeit immediately after) a coalition war in the Persian Gulf. All these landmark developments were presaged by the *kata* of the MSDF. The pattern of the past four decades continues: incremental growth in capability, followed by long practice, culminating in a new mission and public acceptance of enlarged responsibilities.

Notes

1. The analyst Harry Summers wrote the article "Reluctant Samurai" for *Defense & Diplomacy*, January-February 1971, pp. 7–11. *The Wary Warriors: Future Directions in Japanese Security Policies* is a recent RAND study by Norman Levin, Mark Sorell, and Arthur Alexander (Santa Monica, Calif.: 1993).

2. The phrase is borrowed from Boye Lafayette De Mente, *Japan's Secret Weapon: The Kata Factor* (Phoenix, Ariz.: Phoenix Books, 1990).

3. This notion was introduced in Peter J. Woolley, "Low-Level Military Threats and Future of Japan's Armed Forces," *Conflict Quarterly*, Fall 1993, pp. 64ff.

4. For a recent and thorough treatment of these many factors see Joseph P. Keddell, Jr., *The Politics of Defense in Japan: Managing Internal and External Pressures* (Armonk, N.Y.: M.E. Sharpe, 1993).

5. This public view was particularly evident in the public's criticism of the GSDF following the Kobe earthquake of January 1995. Disaster relief was long an important justification of the GSDF to the public. The government and defense agency had not emphasized that role much in recent years, being occupied with the possibility of peacekeeping missions, but the public had not forgotten years of JDA advertising.

6. ASDF transport planes, C-130s, were deployed to Zaire in 1994 in support of humanitarian relief operations, and to Cambodia in 1992 in support of peacekeeping.

7. Moreover, MSDF bases in Sasebo and Yokosuka have facilitated a certain degree of interaction between the U.S. Navy and MSDF, which is not so easily had by the other SDF and U.S. services. See G.A. Rubinstein and J. O'Connell, "Japan's Maritime Self-Defense Forces," *Naval Forces*, no. 2, 1990, pp. 78–83.

8. In September 1990, just after the Gulf crisis began, polls showed about 40 percent of Japan's public opposed any use of the SDF abroad. By 1992 a national poll showed only 20 percent in outright opposition and 68 percent approving the use of the SDF for UN peacekeeping. See "Yomiuri Polls Finds 68% Approval of Using Troops for Peacekeeping," *Daily Japan Digest*, 6 May 1992, p. 2; and *Mainichi Shimbun* (Tokyo), 14 June 1991. Keddell (p. 4) argues that Japan's public opinion "tends to follow the course of events, rather than to determine specific outcomes." An analysis of Japan's changing public opinion is found in David Brobow, "Japan in the World: Opinion from Defeat to Success," *Journal of Conflict Resolution*, December 1989, pp. 571–604.

9. The first postwar overseas dispatch of Japanese warships actually took place before the establishment of the Defense Agency and the MSDF, Japanese vessels being coopted by U.S. naval forces operating against North Korean forces in 1950. See James Auer, *The Postwar Rearmament of Japanese Maritime Forces, 1945–1971* (New York: Praeger, 1973), pp. 64–8.

10. The other ships sent to Hawaii were the 1,400-ton frigates *Sugi*, *Haya*, and *Kusu*.

11. See Auer, p. 121.

12. In fairness to those who unsuccessfully objected, there was much else to focus on that fall of 1957 after the announcement was made. A few days earlier it had been announced that Japan would build two destroyers for the MSDF, paid for by the United States under the Mutual Security Assistance Program. Two weeks later Japan held its first naval review of the postwar era, under the eyes of Prime Minister Shinsuke Kishi, who went aboard the flagship *Yukikaze* with several foreign military attachés. A day earlier, Kishi had made a public appeal to five thousand assembled troops to build up the SDF; later in the day the troops paraded through Tokyo. Seven weeks later it was announced that Japan was buying Sidewinder missiles from the United States, which drew very strong criticism in the Diet. All these episodes were somewhat lost in the general swirl of events both domestic and international. The Soviets had successfully launched an ICBM as well as a satellite, and in Japan a withdrawal of thousands of U.S. Air Force personnel provoked great anxiety over employment. A wave of strikes swept the country by January 1958, causing crippling stoppages in the steel industry and a walkout by the Seamen's Union. Kishi to some extent escaped bitter criticism on many fronts by making well publicized trips abroad.

13. The annual white paper on defense once included among its appendices a record of these overseas training cruises, but such cruises no longer merit comment.

14. *Japan Times*, 21 November 1965, p. 1.

15. For example, in 1981 Ted Shannon Wile concluded that "there is no indication that the Japanese will attempt to develop a convoy escort capability in the foreseeable future" and that "there is no evidence that Japan has embarked on a program to militarily secure her sea-lanes." See Ted Shannon Wile, *Sealane Defense: An Emerging Role for the JMSDF?*, Master's Thesis, Naval Postgraduate School, Monterey, Calif.: September 1981, pp. 143–4.

Thomas B. Modly a few years later suggested that this defense perimeter was a fiction and that the MSDF was far from being able to protect it adequately from Soviet forces: "There exists a significant chasm between the political commitment to adopt such a policy and the reality of Japan's efforts to attain the necessary capability." Modly concluded that "the military significance of the Japanese 1,000-mile defense policy is rather questionable." See Thomas B. Modly, "The Rhetoric and Realities of Japan's 1,000-Mile Sea-Lane Defense Policy," *Naval War College Review*, January-February 1985, pp. 25–35. For a similar but more optimistic conclusion, see Michael Ganley, "Japanese Goal to Protect Sea Lanes: More Rhetoric than Reality?", *Armed Forces Journal International*, September 1985, pp. 104, 107.

By contrast, a 1987 study found that with only "marginal increases in its capabilities to conduct air defense, strait control, and convoy operations, Japan could defend its sea lanes against a threat from the Soviet Union" without relying on the U.S. Navy. See Daniel I. Gallagher, *Sea Lane Defense: Japanese Capabilities and Imperatives*, Master's Thesis, Naval Postgraduate School, Monterey, Calif.: December 1987, passim.

More recently, James Auer asserted that in the 1980s Japan "increased its air defense and antisubmarine capability significantly so as to make its goal [of one thousand–mile sea lane defense] a near reality." See James Auer, "Japan's Changing Defense Policy," Ralph A. Cossa, ed., *The New Pacific Security Environment* (Washington: National Defense Univ. 1993), p. 82.

16. Hideo Sekino (Commander, Imperial Japanese Navy, Ret.), "Japan and Her Maritime Defense," U.S. Naval Institute *Proceedings*, May 1971, p. 119.

17. Ibid., pp. 119, 103.

18. Sekino, pp. 109–10; see a similar analysis by James Auer, "Japan's Maritime Self-Defense Force: An Appropriate Maritime Strategy," *Naval War College Review*, December 1971, pp. 3–20.

19. Comments of Director General Asao Miharo, testifying before the Cabinet Committee in the House of Councillors, reported in *The Japan Times* (Tokyo), 16 November 1977, p. 4.

20. Japan Defense Agency, *Defense of Japan 1978*, p. 206.

21. Auer, *Postwar Rearmament*, asserts (p. 252) that "Japanese ships . . . show good skill at fueling at sea when exercising with U.S. support vessels; and it could be that in an emergency situation . . . Japan's merchant fleet could be used in support of the MSDF's front line units."

22. *Japan Times*, 11 November 1981, p. 1.

23. P. Lewis Young, "The Japanese Maritime Self-Defense Forces: Major Surface Combatants, Destroyers and Frigates," *Asian Defense Journal*, September 1985, p. 86.

24. *Washington Post*, 19 January 1983, pp. A1, A12, A13. Nakasone said at the same time that Japan "should be like an unsinkable aircraft carrier," a remark which at that time drew much more attention in Japan and the Soviet Union than any other part of his remarks.

25. John Moore, ed., *Jane's Fighting Ships, 1985–86* (London: Jane's Publishing, 1985), p. [143].

26. Young, p. 87.

27. This improvement was in both relative and absolute terms: Japan did not draw down its military spending or development plans even as the Soviet Union crumbled. See Peter J. Woolley, "Japan's Security Policy: Into the Twenty-First Century," *The Journal of East and West Studies*, October 1992, pp. 107–19.

28. These were JDS *Hayase*, which served as the flagship; the *Tokiwa*, one of three brand-new fleet support ships; and JDS *Yurishima*, *Hikoshima*, *Awashima*, and *Sakushima*, all commissioned in 1988 and 1989.

29. Hideki Sakata, "Gulf Cooperation Mission Questioned," *Japan Times*, Weekly International Edition, 18–24 November 1991, p. 3.

30. "Readiness to Share Gulf Convoy Costs Shown," in *Foreign Broadcast Information Service—Daily Report, East Asia*, 14 September 1987, p. 2.

31. See Tamara Moser Melia, *Damn the Torpedoes: A Short History of Naval Mine Countermeasures, 1777–1991* (Washington: Naval Historical Center, 1991), passim.

32. Interview with Admiral Manabu Yoshida, JMSDF, Ret., and Vice Admiral Taketo Takata, JMSDF, Ret., 25 July 1991. It was these officers who went to the Gulf and wrote the report.

33. Interview with various ASDF officers and instructors at the Air Staff College and Yakota Air Base, July–August 1991.

34. This was also the conclusion of several members of *Sorifu*, the Prime Minister's Research Office, interviewed July 1991.

35. Naoaki Usui, "Japanese Navy to Bolster Sealift, Supply Abilities," *Defense News*, 24–30 October 1994, p. 18.

36. For a narrative of the complete range of SDF activities in Cambodia, see Japan Defense Agency, *Defense of Japan 1993*, pp. 127–51.

37. See, among others, John Jordan, "The Japanese Maritime Self-Defense Force," *Jane's Intelligence Review*, February 1992, p. 62.

Ψ

We understand generalities best by focusing on the details of particulars.

Stephen Jay Gould, "This View of Life"
Natural History, 10/95
With permission from *Natural History*, October 1995

Swedish Security Policy at a Crossroads

Captain Jörgen Ericsson, Royal Swedish Navy

NOW IS THE TIME TO DETERMINE future Swedish security policy. Sweden's newly gained membership in the European Union (or EU, until 1994 the European Community, or EC) is the foundation on which a new, or altered, Swedish security policy can be built.[1] Sweden's political and military leadership confronts today, without doubt, one of the most important decisions concerning future security policy that it has faced in several decades. Should Sweden remain nonaligned in peacetime, claiming neutrality in war? Or should Sweden engage itself in both the economic and security policies of the emerging new Europe? These questions define the two main alternatives Sweden has to choose between: either to continue to be "alone by herself" or to take an active part in a regional security arrangement within the EU.

Analysis and assessment of current Swedish security policy and the main factors that will influence future policy suggest that Sweden ought to adopt a policy of greater engagement in the common security of Europe. Such a change in direction would make the objectives of Swedish national security policy more achievable. Moreover, many Swedes believe their nation has a duty to shoulder a share of responsibility for the common security of Europe. Sweden has the economic, diplomatic, and military means necessary to do so. These resources could help make Europe into a more stable, democratic, and peaceful region, marked by cooperation between the members of the EU.

Captain Ericsson graduated from the Swedish Naval Academy in 1975 and, in the early years of his career, specialized in surface warfare. He has served aboard various vessels, mostly fast attack craft, but has also taught at his nation's naval academy. In 1988–1990 he was a student at the Swedish National War College; after graduation he was assigned as a staff officer for operations on the Active Fleet Staff and thereafter at the Swedish Defense Headquarters. During 1994–1995 he was a student at the U.S. Naval War College, graduating with the Naval Command College class of 1995. He has recently returned to sea duty, as a squadron commander.

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The Objectives Remain—Can the Means Be Changed?

During the past few years, Europe has undergone more sudden and profound political changes than the continent has experienced in any other peacetime period during the last two centuries. In the post–Cold War era the risk of a major war has decreased considerably. The relatively stable bipolar system, which embodied that risk, no longer exists. However, Europe today can be characterized as more secure but less peaceful. This change is underlined by the war in former Yugoslavia and the ethnic conflicts within and between republics of the former Soviet Union. Hence, though the balance of power between Nato and the Warsaw Pact did involve a greater likelihood of a major war, it was at the same time a balance that deterred regional crises. The absence of this deterrence today signifies a greater risk that bilateral and internal disputes can develop, in a short time, into regional crises or conflicts. Thus, for Sweden, while the end of the Cold War has positive implications, there are still problems, uncertainties, and unknowns.

In addition to these external changes (and to a certain degree because of them), Sweden, together with Finland and Austria, has applied to, negotiated with, and eventually voted to join the EU; it assumed membership in January 1995. These political shifts, bringing membership in the Union, have fundamentally altered the foundations of Sweden's security policy. The new situation implies a requirement for Sweden to analyze carefully how to accomplish its objectives within the context of the EU.

These objectives are clearly stated: "The purpose of Sweden's security policy is ultimately to defend the freedom and national independence of our country. We will in all situations and ways that we choose ensure our freedom of action so that we can develop our society in political, economic, social, cultural and other ways. An important component of our security policy is to work externally for defusing of tension, arms reduction, cooperation and democratic development."[2] Swedish security policy also emphasizes the objective of maintaining a lasting peace and stability in Scandinavia and surrounding areas, with the ultimate goal of removing any risk of Sweden becoming involved in or affected by war.[3]

Up to now, the principal means of achieving these objectives have consisted of staying free from military alliances in peacetime, claiming neutrality in war, and maintaining relatively strong defense forces. Furthermore, Sweden and its armed forces have emphasized the importance of an active part in United Nations peacekeeping missions. Sweden is also a keen member of the Organization for (formerly, Conference on) Security and Cooperation in Europe (OSCE).

Swedish society has fully accepted this policy as the means to accomplish its security objectives; it has over a long period of years become deeply rooted. Most importantly, the policy has been very successful: Sweden has not

participated in any war since the beginning of the nineteenth century. By tradition and necessity, there has always been a strong national consensus concerning security policy, even among politicians with very different ideologies. All this makes it particularly hard for current and future Swedish leaders to begin a process of reconsidering solutions; it will take considerable courage. However, there are objective military arguments that should encourage political leaders to do so.

During the Cold War, Swedish military strategy was founded on the assumption that any major war in Europe that affected Sweden would largely absorb the capacity of the two superpowers, of whose military resources only a small part could be diverted to assault Sweden. On that premise, the nation's armed forces would have had strength enough to deter or to defeat alone such an assault. This military strategy, "the margin doctrine," became obsolete with the end of the Cold War and the disintegration of the Soviet Union. The margin doctrine has been replaced by a new strategy that concentrates on the ability of highly prepared and ready forces to deter or defeat a "strategic assault" from small but highly mobile forces striking at the military and civilian command structure; once fully mobilized, the armed forces are to be able to counter a major assault.

In 1992, a Parliamentary Defense Decision confirmed the new military strategy. It also provided for a small increase in the defense budget in order to maintain and develop defensive capabilities and to afford freedom of action for the Defense Department force structure decisions to be made in 1996. Thus, the politicians have laid down a good basis for reconsidering Swedish security policy.

The European Union Treaty and Swedish Security Policy

In addition to the potential threat and Sweden's geostrategic situation, another important factor to examine in reconsidering Swedish security policy is the development planned for the EU and the demands that will make on the members and, above all, on Sweden.

The Maastricht meeting of December 1991 laid the foundation of the European Union. According to the resulting European Union Treaty, the members of the European Community agreed for the future not only upon a free market and a monetary union (a common currency) but also upon what is known as the Common Foreign and Security Policy. As a consequence of that agreement, the defense component of the EC, known as the Western European Union (WEU), was revitalized as the prospective security organ of the Union, responsible for planning and implementing all defense matters. The treaty

prescribes that these military measures shall be harmonized with Nato and with the individual defense commitments of the signatories. This process is to be implemented as a long-term policy, in a series of phases.[4]

Bilateral or multilateral arrangements may be made within the framework of the WEU or Nato, provided they do not clash with those laid down in the European Union Treaty. At the end of December 1992, all members of EC except the Republic of Ireland became associated with the WEU, as full members or observers. The tasks of the WEU will be to form the European pillar of the transatlantic bridge, provide a forum for regional discussions of the harmonization of defense and security matters affecting Europe, develop a European defense identity, coordinate military operations of its members, and harmonize these operations with Nato.[5]

According to present plans, the EU and the WEU will fully integrate in 1998, with the EU as the political head. But there are still problems to be solved with, as it now seems, this overly optimistic plan. For example, Germany wants to use the Nato command and control structure, which is very effective and already available, rather than create another. France does not agree, wanting no U.S. involvement in the WEU. Germany advocates a close cooperation with Nato as the only organization that possesses a strategic lift capacity, a worldwide intelligence system, and other strengths; furthermore, Germany wants the WEU to be able to act only within a mandate given by the United Nations or the OSCE. France replies that the WEU should be able to take whatever actions its members wish, without limitations. Thus there are still many uncertainties regarding the development of the Common Foreign and Security Policy (or CFSP) and the WEU; however, these uncertainties also constitute possibilities for influencing the emerging cooperative security arrangement.

In addressing the issue of membership in the WEU, Swedish politicians have taken so far a very cautious attitude. In June 1992 the defense minister stated in a speech at the WEU headquarters in Paris that:

> Sweden has as great an interest as any other European country in taking an active part in building up a new security architecture in Europe, in order to be able to handle, contain or solve the security threats and tensions which we are likely to face in the future. . . . As a member of the European Union, Sweden will participate fully in a common security and foreign policy, as established in the Maastricht Agreement in the autumn of 1991. As far as Sweden is concerned, this means a commitment to be responsible for our own defence so that we can remain neutral in the event of war in our vicinity. Sweden is only responsible for its own defence. . . . At the moment, the European structure of cooperation and security is at a formative stage.
>
> There are a number of different possibilities for continued development in the 1990's. In a recent report the Foreign Affairs Committee of the Swedish Parliament stated unanimously that Sweden's policy of non-participation in military

alliances imposes no restrictions on its participation in European cooperation, and that Sweden's security policy is characterized by active and full participation in the endeavours to fulfil the goals shared by all European nations. The Foreign Affairs committee states that "A decision concerning the issue of WEU membership is not possible before Sweden has obtained membership in the European Union. Before that, the issue is without relevance. The policy of non-participation in military alliances still remains."[6]

Swedish defense policy did not alter after the general election in September 1994, when the Social Democratic Party formed a new government. The new defense minister has on various occasions declared that the policy of "non-alignment in peacetime claiming neutrality in war" will not be changed, although Sweden is now a member of the EU.

This position raises at least two important military questions that Sweden needs to answer. First, is it possible to participate fully in the CFSP and, at the same time, be responsible only for the defense of Sweden? Second, is it possible to be a member of the EU and still maintain credible neutrality in the event of war? These issues are essential for determining the nation's future security policy. Before examining them, it is appropriate to address two other important factors influencing Swedish security: the strategic situation and the future threat.

During the Cold War, Scandinavia was a flank of the "Central Front" in Europe and was therefore of considerable strategic interest to both Nato and the Warsaw Pact. This importance increased as the Soviet Union built up a nuclear ballistic missile submarine force in the Kola region. With the end of the Cold War, the military-strategic connection between Scandinavia and Central Europe weakened; with an assault from Eastern Europe into Germany no longer a credible threat, the significance of Scandinavia decreased. Even so, northern Europe retains three important strategic features: its nuclear role, its maritime role, and the fact that Scandinavia has the only common border between Western Europe and Russia.

Russia's nuclear ballistic missile submarines based in the Kola region will increase in importance after implementation of the Strategic Arms Reduction Treaty (Start) provisions. Russia's ability to protect these assets and the Kola Peninsula itself will remain vital to that nation, giving great military significance to Scandinavia and the surrounding seas. This importance is underlined by the fact that the reductions in military forces that have recently occurred in Central Europe, as a result of the 1992 Conventional Forces in Europe (CFE) Treaty, have not spread northward. There are indications that Russia continues to reinforce its capability in qualitative terms on the Kola Peninsula; the withdrawal of modern air forces from former satellite states in Europe has enabled Russia to improve and modernize units deployed on the Peninsula. In addition, Russian

shipyards continue to produce destroyers and frigates to protect the nuclear ballistic missile submarines in the Northern Fleet.[7]

The Nordic area—specifically the Kola Peninsula and the portions of Norway, Sweden, and Finland north of the Arctic Circle (known collectively as the "North Calotte")—remains an important strategic region. The Swedish defense minister referred to this area in a speech at the International Air Display at Farnborough, England, in 1992: "The Kola Peninsula is a central factor in Russia's defence. As long as Russia has some of its most vital military bases located in this area, Sweden and the North Calotte will continue to be interesting from a strategic point of view. In a war situation we can assume that the Russians may try to establish a protected zone to the west of their borders which, as we all know, is where Sweden and certain other countries happen to be situated."[8] During a conference on defense policy in Sälen, Sweden, on 29 January 1995, General Ove Wiktorin, Sweden's newly appointed Supreme Commander, made a related point.

> What kind of world can we look forward to, when considering our security and defense policy? When examining the strategic interest for Sweden and Scandinavia we discover [a] paradox concerning the accomplished arms reduction within the nuclear-strategic area[:] the importance of Murmansk and the Kola Peninsula have increased. This relative shifting northward is an important part of the future strategic interest for Scandinavia and Sweden. More than 60% of Russia's strategic nuclear capacity, compared to 25% a couple of years ago, will now be deployed in the north. The strategic importance of the Kola Peninsula brings, in its turn, a concentration of ground, sea and air units to the area. Hence, Scandinavia and Sweden will remain in the strategic [limelight] for a long time to come.
>
> In this context, it is also appropriate to recognize that Sweden still constitutes a major [littoral state on] the Baltic Sea. The Baltic forms now, as it has for many centuries, an economic intersection-zone. Sweden and Germany are the dominating powers around the Baltic, neighbouring Poland, the three fragile Baltic States, Russia and the Kaliningrad Oblast. The Baltic is Russia's gateway to the West and has, as such, increased in strategic importance.[9]

Four Main Actors Shape the Europe of Tomorrow

For some considerable time in the future, security policy in Europe and hence for Sweden will be dominated by four entities: Russia, the EU and WEU collectively, Nato, and (probably playing a lesser role) the OSCE. Their interactions with each other will define reactions to future threats and so will have an impact on Sweden's defense planning.

Consider, first, Russia. The breakdown of the Soviet Union opened up promising opportunities for peace and democracy, but there is a major risk that these opportunities will evaporate. The collapse of the Soviet Union left its main

successor in a state of political and economic disintegration. Several ethnic conflicts exist within Russia, some of which verge on civil war or have already degenerated into combat. Russia also has disputes with its neighbors over the distribution of the USSR's military assets, including the fleet and enormous stocks of nuclear and conventional armaments. These disputes will probably remain a source of political and military tension for a long time to come. Another cause of irritation and uncertainty is the large number of ethnic Russians living outside Russia, in such states as Estonia, Latvia, Lithuania, and Ukraine. Russian politicians have, on various occasions and in more or less harsh words, emphasized Moscow's interest in protecting the well-being of these ethnic Russians.

Scholars and other experts have written at length about developments in Russia. Most describe the risks connected with the evolution of a democratic and peaceful Russia with a functioning market economy. A former American national security advisor, Zbigniew Brzezinski, put it this way in 1994: "Unfortunately, considerable evidence suggests that the near-term prospects for a stable Russian democracy are not very promising. The growing political influence of the Russian army, especially in Russia's foreign policy, is not reassuring."[10]

The counterpoise to Russia is now Nato and the EU (including the WEU), which have a great interest in trying to guide Russia on the proper path. Nato is concerned with military security, stability, controlled disarmament, and the nonproliferation of nuclear weapons. The EU shares, for obvious reasons, these concerns but sees also great economic issues at stake. Russia and the other former Soviet republics are vital as prospective markets for the future economic growth and well-being of the European Union.

Will the purely European second entity—the EU with the WEU—ever be sufficiently mature and united to take on this challenge successfully? There are many doubters and few optimists (and the latter are often found amongst politicians within the EU). Since the Maastricht meeting of December 1991, there has been ever increasing doubt about and criticism of the total unification of Europe, particularly from the average citizens of the long-time, as well as more recent, member countries. This unease was made clear in the referenda that were held prior to the ratification of the European Union Treaty; in each country, a significant minority voted No.[11]

The votes in Austria, Finland, and Sweden for membership in the EU should not be interpreted as wholehearted support for the implications of the Treaty but rather as wishes to be inside, rather than outside, the Union. In the long term, probably no European country is economically strong enough to guarantee growth and well-being for its citizens outside the EU. The Norwegians, in their referendum in November 1994, voted against membership mainly because of their strong economy (based on vast oil resources) and out of concern that their

fishing industry would be hurt by competition within the Union. However, there is now great concern in Norway that staying outside the Union may in the long term weaken the economy; its government will probably hold a second referendum in 1996. Switzerland, another country still outside the EU, did not seek membership, due to its neutrality. Like Norway, Switzerland is worried about the long-term effect on its not very strong economy; Swiss neutrality could prove to be very expensive.

The EU and the WEU will have only the power given to them by their members, and there is today considerable hesitation among them as to how much power they should possess. There is no overwhelming majority of people in any sector that wants to strengthen the EU and WEU at the expense of national sovereignty and regional identity. Even in the area of economic cooperation there are issues that are unsolved because of unwillingness to deemphasize national self-determination. There is a risk that the EU and the WEU may for a long time fit the characterization given by Belgian foreign minister Mark Eysken during the Gulf war: "The EC is an economic giant, a political dwarf and a military worm."[12]

The third entity significant in Europe's future—Nato, perhaps foremost the United States—has won the Cold War. The alliance and the U.S. have since then had problems similar to those of the EU and the WEU in adjusting to the rapid developments in Europe. Several Eastern European states have already expressed their wish to become members of Nato. At home, the U.S. has been and still is debating its future national and military strategy. There are advocates for a variety of directions: isolationism, collective security, and primacy. In July 1994 the Clinton administration finally issued its "National Strategy of Engagement and Enlargement," committing the U.S. to leadership by encouraging and endorsing democracy and a stable security structure. The strategy (reaffirmed in February 1995) emphasizes the importance of Nato and U.S. forces in Europe—in rough numbers, a continued deployment of about a hundred thousand troops. The newly created Partnership for Peace (PFP) provides a vital context: "With the adoption of the U.S. initiative, [the] Partnership for Peace, at the January 1994 summit, NATO is playing an increasingly important role in our strategy of European integration, extending the scope of our security cooperation to the new democracies of Europe. Twenty-five nations, including Russia, have already joined the partnership, which will pave the way for a growing program of military cooperation and political consultation. . . . In keeping with our strategy of enlargement, [the] PFP is open to all former members of the Warsaw Pact as well as other European states. . . . As the President has made clear, NATO expansion will not be aimed at replacing one division of Europe with a new

one, but to enhance the security of all European states, members and non-members alike."[13]

Russian military and civilian spokesmen have used harsh language in protesting any expansion of Nato. The foreign minister has gone so far as to declare that enlarging Nato would create "a buffer zone that could be crushed in any situation." Similarly, the defense minister, Marshal Pavel Grachev, has insisted that "Russia cannot allow Poland to be admitted into Nato."[14] During the latest OSCE summit in Budapest, plans for an extended Nato resulted in a verbal clash between presidents Clinton and Yeltsin: the two clearly disagreed on the role Nato ought to play in coming years. In particular, Yeltsin denounced plans for extension of its security guarantees to certain former Soviet satellites: "Europe, not having yet freed itself from the heritage of the Cold War, is in danger of plunging into a cold peace. Why sow the seeds of mistrust? After all, we are no longer enemies, we are partners."[15]

During the Cold War, the two superpowers carefully respected each other's sphere of interest. This concern was reflected in the events of Hungary in 1956, Czechoslovakia in 1968, and in Grenada and Panama during the 1980s. The reason was simple: neither superpower had vital interests within the other's sphere. Therefore it is hard to believe that the U.S., and hence Nato, has a vital interest in giving extensive security guarantees to, for example, the Baltic states or Poland. There is an obvious risk that the Partnership for Peace will be an everlasting "waiting room," of insignificant importance, for Eastern European states who now strive toward membership in Nato. To add members from among former communist states in the vicinity of Russia would not lead to détente in Europe. If we are fortunate enough to see Eastern Europe and Russia take a turn for the better, Nato will probably, in the long term, evolve into an organization having more political and fewer military overtones.

The fourth entity important to European security policy, and hence to Sweden's decisions, is the Organization for Security and Cooperation in Europe. Since its origins in Helsinki in 1975, OSCE has negotiated and implemented an array of confidence-building measures. These CBMs have undoubtedly contributed to reducing misperception of various military deployments and exercises. In addition, OSCE has in recent years expanded its activities by involvement in peace-making efforts in former Yugoslavia and in the Nagorno-Karabakh region of Azerbaijan. These efforts have been partly coordinated with the WEU, but so far they have not been especially successful. The very number and diversity of its members—fifty-three nations, spanning the globe from Vancouver to Vladivostok—make it impossible for this organization to speak with one voice.[16]

Not surprisingly, the policy trends and possible future development of these main actors—Russia, EU and WEU, Nato, and to a lesser extent, the OSCE—point to no clear and mechanistic conclusions regarding the threat to Sweden. The rate of change in Europe is still rapid and will probably continue to be so for another decade or two. It is too early to perceive a stable threat spectrum that will influence northern Europe. Therefore Sweden must realize that the future has uncertainties and unknowns that will affect its own security policy.

The risk of a third world war has faded away, but new possibilities, like a revanchist and expansive Russia, regional conflicts, terrorism, organized crime, and uncontrolled floods of refugees, have emerged. An important observation is that the threat spectrum of today and tomorrow has become less predictable and more complicated than that of yesterday. A worst-case scenario may be a Nato exerting less credible military deterrence, weakened Western European cooperation within the EU and WEU, and an expansive, rearmed Russia. A future Swedish security policy must contribute to preventing, or if necessary handling, such a situation.

What Are the Possible Solutions?

What are the possible and achievable security policies for Sweden, as a member of the EU? The defense minister, it will be recalled, has clearly defined one alternative: "Sweden will participate fully in CFSP, as established in the Maastricht Agreement. As far as Sweden is concerned it means a commitment to be responsible for our own defense so that we can remain neutral in the event of war in our vicinity. Sweden is only responsible for its own defense."[17] But in the new situation in Europe, in the post–Cold War era, there are other feasible choices. Three concrete and achievable alternatives for Sweden are: to remain nonaligned with respect to any military alliance and claim neutrality in event of war, to apply for membership in Nato, and to apply for full membership in the Western European Union.

Nonalignment and Neutrality. The EU is developing within a Western European society that is highly computerized, economically integrated, and benefiting from an enormous flow of information and the activities of multinational corporations. Sweden will be a part of an organization striving to be a unified community founded on solidarity amongst its members. Would it then be possible to exclude certain Swedish security assets when they are most needed, in times of crisis or war in Europe, by arguing that they should be used solely for the defense of Sweden?

When advocating Swedish membership in the EU but also nonalignment and neutrality in the event of war, Swedish politicians often use the Republic of

Ireland as an example. Ireland has long been a neutral member of the EU and is, therefore, not a member of the WEU; but Ireland has a strategic situation completely different from that of Sweden. Ireland, west of Great Britain, is far from Russia, far from its nuclear capability on the Kola Peninsula, and far from the former communist states of Eastern Europe. Hence, the argument that Sweden can copy the Irish solution is not valid. Furthermore, it is doubtful if a country that is deeply engaged in an economic and political union can really, according to international law, claim neutrality. If it does, can that neutrality have any credibility? It would certainly not be credible to any country that was opposed to, or in conflict with, a member of the EU.

The core question remains: Can Sweden achieve its stated objectives by dividing its security policy into two dimensions, one within the EU and one claiming a neutrality of doubtful credibility? In such a situation Sweden would gain little military security from the other members but would nonetheless be looked upon as aligned with the EU's security arrangements. To divide its resources and effectively "stand alone" in a Europe whose future is thick with uncertainty is the worst alternative. It gives Sweden only the security the nation can achieve by itself, and it forfeits the strength that can be drawn from collective arrangements. Neutrality and freedom from alliances had value during the days of the Cold War; that intrinsic value has been sharply reduced, if not completely eliminated, for the Europe of today and tomorrow.

Sweden, with relatively limited resources, would be better able to achieve its objectives through the weight and power of an alignment or alliance. If it should seek security cooperation within an alliance or alignment, there are two alternatives: to apply for membership in Nato (and, by entering Nato, gaining membership in the WEU), or to seek to join the WEU only.

Collective Security within Nato. A daily Swedish newspaper with nationwide circulation has editorialized that Sweden should apply for membership in Nato as soon as possible. Its main reason is the rather extensive reduction of the Swedish defense budget currently being discussed by the Social Democratic government. If it should take place, the argument goes, the Swedish defense forces will have difficulty in maintaining credible deterrence against aggression and will not be adequate to defend the country in case of assault. Therefore, the newspaper concludes, Sweden needs the military assistance and security guarantees that membership in Nato would give. This view, and the perception of Nato as a simple and cheap solution, reflect a surprising naiveté in the public debate. Should Nato accept a future Swedish application for membership, it would most certainly do so with the condition that Sweden contribute resources of at least the same strength and quality as its present armed forces. In fact, there is a general opinion in the United States that its allies in Europe and in Asia with

strong economies ought to make greater contributions to the defense of their own regions.

Nato membership—assuming that the alliance would accept Sweden, which is far from certain—does have appeal. To be a member of the most powerful military organization ever established would bring security in the shape of deterrence and, in conflict, vast military resources. But Swedish membership would also draw a new line in Europe, one that would be farther east than it used to be, closer to Russia and to one of its most important security interests, the Kola Peninsula. Furthermore, Swedish membership in Nato would have great impact on Finland. In recent years Finland has succeeded in loosening ties with Russia dating back to the termination of World War II. It has been a drawn-out process and not without difficulties. Sweden's role in "Nordic stability"—i.e., as a neutral country between a Nato member, Norway, in the west and Finland in the east—probably facilitated Finland's success. Swedish Nato membership could be perceived by Russia as a threat, particularly if any of the former Warsaw Pact countries were also moving toward the alliance. To avoid being bullied into a new security arrangement with Russia, Finland would probably be forced to apply for membership as well. Such a development would most certainly make less benign the present positive trend in relations between Russia and Western Europe. By becoming a Nato member, therefore, Sweden would create a paradox: a higher degree of security but increased tension in northern Europe and thereby a greater risk of being involved in a crisis or a conflict.

Thus, Nato membership would only superficially achieve the objectives of Swedish security policy. That solution would not support the important components of Swedish security policy that concern the defusing of tension, arms reduction, cooperation and democratic development, and contributing to lasting peace and stability in Scandinavia and surrounding areas. In all of these aims the ultimate objective is to reduce the risk of Sweden becoming involved in or being affected by war. There remains, therefore, only one alternative: to apply for membership in the WEU only.

Collective Security within the EU. To provide security for its members, the European Union will try to foster, through the CFSP and the WEU, peace and stability in Europe. In accepting the European Union Treaty Sweden has also accepted the CFSP, which is a commitment to work with other members to achieve the objectives of the Union—which are the same as those on Sweden's agenda. If the EU is to achieve those aims, each member must cooperate to the best of its ability and contribute with all means available. The armed forces of each member, together with diplomacy and strong economies, are important elements in this process. Sweden has competent and relatively strong armed

forces; in fact, it is militarily the strongest of the three new members. Furthermore, Sweden has gained a good reputation throughout the international community and a great deal of experience from taking part in several UN peacekeeping missions. Clearly, the armed forces of Sweden can contribute to the goals of the EU.

As noted, the path toward a peaceful and democratic Europe is filled with pitfalls and problems. To become a member of the WEU is, therefore, no guarantee of achieving the objectives of Sweden's security policy, but it gives the nation an opportunity to influence developments in a direction consistent with its interests. In addition, Swedish membership in the WEU strengthens the collective security arrangements of Europe and in turn the security of Sweden. Hence, this alternative would seem to avoid the tensions associated with an expanded Nato, add to Sweden's defense, and contribute to unity of effort in Europe. These arguments suggest that full membership in the Western European Union is a solution that has lower risks, less uncertainty, and fewer unknowns than the other alternatives; furthermore, it increases Sweden's and Europe's ability to prepare for any anticipated dangers of the future.

As a member of the WEU, Sweden ought especially to contribute in a number of areas.

- *Fostering cooperation and confidence* through active diplomacy within the WEU, as well as between the WEU and the former communist states of Eastern Europe (especially Russia and Ukraine). The WEU is not yet the fully structured defense organization needed to serve the EU. During the buildup phase, it is essential that all members, particularly such nations as Sweden, actively engage themselves to bring about an organization that serves small nations as well as more powerful countries.
- *Integrating the former communist states* of Eastern Europe into the security structure.
- *Coordinating the WEU with the OSCE*, strengthening both organizations. Today the interface within the security structure of Europe, containing Nato, the OSCE, and the EU and WEU, is somewhat vague as to responsibilities and missions. The future European security structure needs to clarify the missions and responsibilities of the organizations in order to facilitate unity of effort.
- *Providing armed forces that are strong and well balanced*, able to deter and to defend Swedish territory against any aggression. Sweden has the military capability, the infrastructure, and the economic means necessary to sustain forces capable of crisis management, deterrence, and defense.
- *Taking part in peacekeeping missions.* Besides well trained units, Sweden can contribute extensive experience in peacekeeping missions and also specially designed training for various kinds of peacekeeping units. Furthermore, Sweden

should influence the development of the WEU toward an organization that acts as a peacekeeper within a mandate given by the UN or the OSCE.

• *Providing peace enforcement forces* that are ready, equipped, and trained for peace enforcement missions within a mandate given by the UN or the OSCE. If necessary, the WEU, either in cooperation with Nato or alone, must be able to conduct peace enforcement. This ability should be used primarily for deterrence but, if need be, can be employed to avoid further instability such as that seen in former Yugoslavia.

The Right Time, and High Time

For the moment, there is no immediate and overwhelming threat to Sweden. Europe is undergoing a rapid and fundamental transformation from the Cold War into something that is, so far, unknown. It is to be hoped that the result will be a peaceful continent with more cooperation and with less tension between nations. But the road toward the Europe of tomorrow contains numerous possibilities and challenges; to be able to take on the challenges and capitalize on the possibilities, Sweden needs a security policy that is adjusted to the new situation. Now is the right time—and it is high time—to consider carefully and then decide upon a new course toward fulfillment of Swedish security policy's objectives. It is essential for Sweden to choose a solution that will be valid into the next century, that is flexible, and that is able to influence the developments of the emerging collective security system of the new Europe.

Notes

1. As a result of the Maastricht meeting of December 1991, the European Community (EC) became the European Union (EU) in January 1994.
2. Swedish Ministry of Defense, *Swedish Defense* (Stockholm: 1993), p. 14.
3. Swedish Defense Headquarters, *Facts and Figures: Swedish Defense 1994/95* (Stockholm: 1994), p. 4.
4. Bundessprachenamt (Federal Republic of Germany Information Agency) SI 1, *European Security in the 90's* (Bonn: January 1994), p. 10.
5. Ibid., p. 6.
6. Swedish Ministry of Defense, *Defense Made in Sweden: Speeches by Defense Minister Mr. Anders Björk* (Stockholm: 1992), p. 7.
7. Erik Rossander, "Betydande rysk kapacitet kan åter utvecklas," *Arménytt*, February 1994, p. 14.
8. *Defense Made in Sweden*, p. 10.
9. Swedish Defense Headquarters, *Info Nytt*, no. 4/95 (Stockholm: 2 February 1995), pp. 6–7.
10. Zbigniew Brzezinski, "The Premature Partnership," *Foreign Affairs*, March/April 1994, p. 71.
11. In Denmark the majority actually voted No, which meant substantial problems for the EC. The issue was solved by giving Denmark explicit exceptions from the treaty.
12. Ronald D. Asmus et al., "Building a New Nato," *Foreign Affairs*, September/October 1993, p. 31.
13. William J. Clinton, *A National Security Strategy of Engagement and Enlargement* (The White House: February 1995), pp. 26–7.
14. Brzezinski, p. 77.
15. *Providence Journal Bulletin*, 6 December 1994, p. A7.
16. Asmus et al., p. 31.
17. *Defense Made in Sweden*, p. 7.

The Impact of Religious Belief in the Theater of Operations

Lieutenant Commander Paul R. Wrigley,
Chaplain Corps, U.S. Naval Reserve

I look upon the spiritual life of the soldier as even more important than his equipment. . . . The soldier's heart, the soldier's spirit, the soldier's soul are everything. Unless the soldier's soul sustains him, he cannot be relied upon and will fail himself and his country in the end.

General George C. Marshall[1]

WARS ARE NOT FOUGHT BY MACHINES; they are fought by people, affected by the intense emotions arising from combat. As Carl von Clausewitz acknowledged: "Military activity is never directed against material force alone; it is always aimed simultaneously at the moral forces which give it life, and the two cannot be separated."[2] For Clausewitz the term "moral" referred to the "sphere of mind and spirit," intangible attributes, the principal being "courage." While Clausewitz was not concerned specifically with the spiritual, religious belief is a moral force, one that should not be ignored in the theater of operations.[3] Antoine-Henri Jomini's *The Art of War*, written with full awareness of earlier centuries of European religious strife, included the "propagation, crushing, or defending of religious theories" among "the reasons that states go to war"; Jomini considered such wars "above all the most deplorable."[4]

This article argues that although acknowledged by present doctrine, religious beliefs are considerably more important to military operations than is generally

Chaplain Wrigley is currently assigned to the Chaplain Resource Board in Norfolk, Virginia. He graduated from the U.S. Naval Academy in 1976 and earned his wings as a naval aviator in 1978. He flew A-6s with Attack Squadron 85 and was an instructor in Training Squadron 23. He left active duty in 1983 to attend Biblical Theological Seminary in Hatfield, Pennsylvania, reentering active service in 1989 as a chaplain. He served thereafter aboard USS *Home* (CG 30) and as staff chaplain at Marine Corps Air Station, Cherry Point, North Carolina. He graduated with distinction from the Naval War College in 1995.

recognized. For example, the joint directive on staff estimates mentions religion only briefly and obliquely: "Consider social conditions, which run a wide range from the psychological ability of the populace to withstand the rigors of war to health and sanitation conditions in the area of operations. Language, social institutions and attitudes, and similar factors that may affect selection of a [course of action] must be considered."[5] The commander's staff planners are to "describe language, religion, social institutions and attitudes, minority groups, population distribution, health and sanitation, and other related factors."[6] The publication then discusses the effects of the sociological situation in terms only of broad enemy capabilities and options for friendly forces; little guidance is given for analyzing religion's impact on the theater of operations.

This outlook reflects the West's downplaying of—even to the point of disregarding—the direct influence of religion on politics and war; it stems from a prevalent feeling that religion is a private, not a public, matter. That view is not held in other parts of the world, and such myopia can lead to misunderstanding. Religion and religious belief are powerful forces that have existed since the dawn of man. They are not limited to any one part of the world but touch the lives of men, women, and children around the globe. For many, religion is the true source of courage and strength. It can inspire and mobilize combatants and affect the outcome on the battlefield.

An operational commander, however well trained in the military issues, who is ignorant of or discounts the importance of religious belief can strengthen his enemy, offend his allies, alienate his own forces, and antagonize public opinion. Religious belief is a factor he must consider in evaluating the enemy's intentions and capabilities, the state of his own forces, his relationships with allies, and his courses of action.

While religion is difficult to define, one general approach calls it "the acknowledgment of a higher, unseen power; an attitude of reverent dependence on that power in the conduct of life; and special actions, e.g., rites, prayers, and acts of mercy, as peculiar expressions and means of cultivation of the religious attitude."[7] On the grand scale, religion has the power to change the very fabric of society. It can shape the personal, political, economic, and cultural foundations of a people. The Christianization of the West and the rise of Islam are two examples of religious movements that wrought tremendous change in the world and continue to have a profound impact upon it. On the personal level, religion can alter individual lives. It has brought comfort and peace of mind to millions of men and women, providing a sense of meaning and worth, and offering the key to understanding oneself and one's existence. Religious faith has enabled people to endure, even triumph over, personal hardship and tragedy.

Religion, Fundamentalism, and Nationalism

Precisely because religion is intensely personal, it can be a destabilizing social factor, especially when attempts are perceived to trivialize, control, or destroy it. It can mobilize some of the deepest passions in humanity; many people have been willing to die for their faith. Wars have been fought and atrocities committed in the name of religion. "Religion, in short, *matters* to people; it is real, and so is its influence on human personality. For some it is more real than the state. . . . [It] is more real, more alive, more vital than the good opinion of others. . . . The essence of religious martyrdom is the sacrifice that comes from the refusal to yield to what one's society demands. Anyone who believes deeply is a potential martyr, for belief always entails a bedrock principle that will not yield."[8]

Not surprisingly, then, many sources of conflict, even apparently secular nationalism, involve deep religious issues. Is the threat ultimately a religious movement (as exemplified by radical Islamic fundamentalism) or an ethnic demand for a separate government and flag? Fundamentalism and nationalism are often in a symbiotic relationship, too closely intertwined to be distinguishable. One analyst observes that "nationalism and fundamentalism are not separate problems. They are essentially identical. If their rhetoric differs, their causal impulses do not. Their psychological appeal to the masses is identical. Nationalism is simply secular fundamentalism. To the extent they differ at all, religious fundamentalism may even become the preferable disease from the US standpoint. In any case, these are *twin* enemies. And we are going to have to struggle with them, on many fields, for a very long time to come."[9]

Certainly, from the commander's viewpoint, nationalism and fundamentalism do share many elements.[10] Deciding which is which, and accordingly who is likely to do what, is frequently complicated thereby. In any case, nationalists and fundamentalists can be difficult to deal with, whether as enemies or allies. They are often hostile toward cultural change and view other peoples—particularly those of the West—with suspicion. They consider their ideas the only important ones; other opinions do not really count. Their actions may seem irrational, and their views on human rights, especially concerning the treatment of prisoners and civilians, may differ drastically from those of Western military commanders. Atrocities such as massacres can "occur because powerful ideological forces—be they fascism, nationalism, or religious fundamentalism—can produce deep-seated hatred between states."[11]

Religious Belief and the Commander's Estimate

Clearly the commander's task will not be easy; the world remains a dangerous place, even with the end of the Cold War. Commanders will face both combat

and military operations other than war, and religion can play a critical role in either. What aspects of religious belief, then, should the commander consider in planning for theater operations?

In preparing his estimate of the situation, the commander is to "determine and analyze those factors that will influence the choice of a [course of action] as well as those that affect the capabilities of the enemy."[12] Several general areas of concern about this topic should be examined: religions present in the region, clergy, religious beliefs, modes of worship, the role of religion in the motivation of indigenous people, its effect on transcultural communication and that of socioeconomic factors on religion, relations of religious communities with government, and the influence of religious schools. Planners should also note principal faith symbols and the significance of sacred shines, temples, and holy places.[13]

In general, commanders need to examine the religious factors involved on all sides and predict how they might influence the enemy, allies (and thus the coalition), their own troops, and public opinion at home and around the world. Reactions among any of these to decisions related to religious belief can seriously impede operations in the theater; a commander sensitive to the issue can at least minimize if not preclude problems.

Effects upon the Enemy. Among the issues that should be examined is the relationship between religious leaders and the government of the adversary state. Is the government secular or dominated by clerics? If the latter, are they fundamentalists? If secular, are there strong religious forces at work within the country? If so, what is the political manifestation? (For instance, in several nations Muslims are at odds with their governments, seeing themselves as true believers and considering it "blasphemous and unnatural" to be ruled by "misbelievers."[14] Also, Islamic fundamentalism in general offers "unswerving opposition to the West" and rejects "any Western influence or presence in the lands of Islam."[15]) Are there sacred shrines, temples, or holy places, the damaging of which could be portrayed as desecration and would increase the resistance of the enemy? How might the enemy use religion as a propaganda tool to inspire his own forces or to erode his opponent's will to fight?

Effects upon Allies. The commander also needs to consider how religion affects relationships with his allies. He should be sensitive to religious issues that might offend his allies or be used as propaganda by the enemy. Joint doctrine recognizes that "each partner in multinational operations possesses a unique cultural identity—the result of language, values, religious systems, and economic and social outlooks. Even seemingly minor differences, such as dietary restrictions, can have great impact. Commanders should strive to accommodate religious

holidays, prayer calls, and other unique cultural traditions important to allies and coalition members, consistent with the situation."[16] Even minor differences can have great impact. For example, during Operation PROVIDE COMFORT in April 1991 the United States air-dropped military "Meals Ready to Eat" containing pork to starving Kurdish Muslims, who complained about being given food that violated their religious dietary restrictions.[17]

There can be more serious repercussions; for instance, as Israel learned the hard way, potential allies can be turned into enemies. During the 1982 invasion of Lebanon, in a remarkable event, "smiling Shiites" welcomed Israeli soldiers and tossed flowers to them. The Shiites praised the Israelis "for their deliverance" from the Palestine Liberation Organization. But perceived Israeli arrogance soon turned the liberation into what seemed an occupation. "No other facet of Israel's gross misadventure in Lebanon," notes one commentator, "presents a clearer case of bad judgment and self-defeating policy than Israel's mishandling of the Shiite population of south Lebanon that turned a confederate against the Palestinians into a formidable adversary of the State of Israel."[18] In the event, many Shiites turned to Iran, Islamic fundamentalism, and Hezbollah, the Party of God.

Effects upon Own Forces. The commander also needs to be concerned with the impact of religious belief upon his own forces. He is responsible for the religious, spiritual, moral, and ethical well-being of those within his command. As soldiers approach combat, their anxiety over their safety and their interest in spiritual matters increase. The commander who develops a strong plan for combat religious ministry will increase the morale and combat effectiveness of his unit.

Captain Kevin Smith notes that "a unit's true fighting power is a constantly changing combination of both psychological/moral force . . . and the purely mathematical possibilities of weapons effects." The concept of maneuver—the central element of modern, joint U.S. combat doctrine—seeks to create disruption not so much by what is happening at the moment as by causing mental apprehension, doubt, and fear as to what might come *next*. When this happens—and it can happen to either side—a unit's "morale envelope" is said to be threatened. The size of that "envelope" fluctuates and depends upon many variables; in Smith's model, a unit with a large "morale envelope" is likely to hold and fight longer than a unit with a smaller one. Smith notes, "The notion of violating a [morale envelope] through maneuver—and then disrupting the enemy's morale—applies throughout the entire warfighting spectrum. We must keep in mind that it can happen to us as easily as to the enemy."[19]

"Moral force," as Smith uses the term, is usually understood as "the courage, daring, and combativeness of a body of troops" and is often presumed in the West to have nothing to do with religious or ethical standards.[20] But religious

belief can have a tremendous impact upon it. Spiritual resources can provide strength, inner peace, security, and a sense of tranquility to the soldier, thereby increasing the moral force of the unit. Here a chaplain is invaluable; he provides the spiritual resources that enable soldiers to strengthen their faith and thus the moral courage crucial for survival in combat. One battalion commander has said, "Combat veterans know full well the positive influence a chaplain has on unit morale, and few at any level would go into combat again without one."[21]

Effect upon Public Opinion. Finally, interest in spiritual matters also increases domestically as friends and family members in the military face potential combat. The public is concerned about anything that threatens loved ones. The commander must be sensitive to any decisions that will be perceived as inhibiting the fundamental right to worship or violating religious codes or freedoms. Such actions can arouse public opinion and erode support.

Religion, then, is a powerful force that touches the lives of countless people throughout the world. It is intensely personal and can mobilize its adherents to endure great hardship for the sake of a divine goal. Religion's role in the theater of operations is often underestimated, because of underestimation of religion's influence on politics and war, and it is hard to quantify, due to varying individual cultural backgrounds. Wise operational commanders will attempt to identify its impact upon their enemies, their allies, their own forces, and the public.

The importance of religion to fundamental aspects of military operations is fresh in mind from recent experience. A number of episodes from American military history also demonstrate why commanders should incorporate religious factors into their planning. Let us examine four disparate U.S. military operations in this light.

Desert Shield and Storm

Of all the matters that concerned General Norman Schwarzkopf leading up to and during the Gulf war, "the touchiest issues almost always involved religion."[22] They affected "everything from building the international political coalition to the role of the Israelis to individual religious practices."[23] Religion was a topic of debate in the theater of operations, across the United States, and throughout the world. In Saudi Arabia, as will be discussed, restrictions on public worship and the "chaplain" issues became media events.

Iraqi Manipulation. Saddam Hussein tried to use religion to fracture the coalition by driving a wedge between its Islamic members and the others. A radio station in Yemen, which was sympathetic to Baghdad, broadcast an

interview with a man who deplored the "defilement" of the Muslim holy cities; he claimed that a U.S. tank had damaged his car in Mecca and that an American military checkpoint controlled access to the holy sites.[24] Iraq also tried to split the coalition by drawing Israel into the war; the Scud missile attacks on that nation were designed to elicit an Israeli military response against Iraq. A less well known Iraqi effort was an attempt to create a rift between the government and the people of Saudi Arabia by exploiting tension between the monarch and Islamic fundamentalists. King Fahd is the custodian of the two holiest sites in the Muslim world, the shrines at Mecca and Medina. Hussein accused Fahd of desecrating the holy sites by allowing American unbelievers to enter. The accusation was taken up by Iraq's allies, including Jordan.[25]

Saddam Hussein attempted to gain a military edge by using religion to rally the Iraqi people. Hussein declared that "in a war there will be many losses. God is on our side. That is why we will beat the aggressor."[26] Conversely, he also took advantage of the coalition's care not to damage mosques, holy places, archaeological sites, and the like, by stationing combat assets near them.[27]

Interactions with Saudi Arabia. The conduct of non-Islamic worship in Saudi Arabia was a difficult issue for the coalition. Under the Koran, Islamic law prohibits any faith group other than Muslim from practicing its religion in that nation. There was, therefore, concern about the reaction of Islamic fundamentalists in Saudi Arabia. One prominent theologian who opposed the U.S. presence declared that the "practice of foreign faiths on our sacred soil gives offense to Islam. The transgressions of Saddam are merely the excuse America is using to spread the disease of imperialism."[28] The Saudis were so anxious in this respect that King Fahd even brought in Islamic scholars to "verify the sanctity of the mosques."[29]

The presence of Jewish service members and chaplains was a particularly sensitive matter. An article about the celebration of Rosh Hashanah, the Jewish new year, in Saudi Arabia caused Prince Khalid to complain to General Schwarzkopf, "You have brought a rabbi into this country who is saying that for the first time in history, the ram's horn will be blown on Islamic soil!"[30] Schwarzkopf summoned the newly arrived Central Command (CentCom) chaplain, Colonel David Peterson, and told him, "You have the King on the ceiling! There are three things that can cause this whole coalition effort to come unraveled and you have one of them! Now you get out there and you keep your chaplains under control. And you make sure that all my troops have the opportunity to practice their faith."[31]

Therein was the dilemma: the coalition needed to provide for the religious expression of U.S. forces without offending the Saudis. A number of controversial policies were implemented in an attempt to deal with the problem. General

Schwarzkopf called together his chaplains to provide them guidance. Those in the cities were "to take the Christian or Jewish insignia off your uniforms, or to wear them in such a way that they can't be seen." (Chaplains in the field would not be affected by that requirement.) He was also concerned about religious services: "We won't advertise them, publicize them, or let them be filmed—we don't want them broadcast on TV for the whole Moslem world to see." General Schwarzkopf expected resistance from the chaplains, especially on the issue of insignia, and was surprised therefore when the chaplains "readily agreed, and even went a step further: they started calling themselves 'morale officers.'" (The Air Force had used the term "morale officer" to refer to its chaplains in Saudi Arabia even before Desert Shield. The U.S. European Command had also adopted it. From there, "morale officer" found its way into the CentCom policy.)[32] These guidelines were codified in a directive promulgated on 12 September 1990.

That directive placed restrictions on the display of faith-specific religious symbols (including flags and pennants), use of religious articles, distribution of religious materials, media coverage of religious services, and accessibility to chaplains by the media. Worship services were to be called "fellowship groups" and were not to be conducted "in open areas or in the view of Host Nationals." Information concerning these services was to be "disseminated verbally or through intra-unit correspondence . . . to prevent inviting unwanted attention to religious services."[33] However well intended, many of these strictures had a negative effect upon the American forces and public opinion in the United States.[34]

There were, on the other hand, examples of cooperation between U.S. forces and the Saudis. The CentCom chaplain, on his own initiative, met regularly with the Saudi Arabian Army's Religious Affairs Department. He explained how chaplains and their assistants provided religious support to U.S. soldiers. Chaplain Peterson made arrangements for American Muslim soldiers to worship in local mosques and to participate in an *Umran*, a pilgrimage to Mecca. The Saudis understood the American desire to worship; they just wanted it done discreetly.

Religion was also a factor in planning the offensive against Iraqi forces. In late October 1990, coalition military leaders discussed timing, and General Schwarzkopf was told "that the window of opportunity for an attack would slam shut in March, when Ramadan, the Moslem holy month, began"; the coalition would need to define its goals quickly and begin its offensive soon.[35] Fasting during the month of Ramadan is one of the five pillars of the Muslim faith, and its importance to Islamic allies could not be ignored.

During the ground offensive, an unexpected challenge arose when large numbers of Iraqis were captured. Between 5 and 20 percent of the Iraqi enemy prisoners of war (EPWs) claimed to be Christian. Numerous Iraqi EPWs

requested the opportunity to see Christian chaplains; special tents were set up for Iraqi Christians to worship, and Arabic New Testaments were provided. The Saudis were reluctant and unprepared to provide religious support for EPWs until the CentCom chaplain reminded them of Geneva Convention requirements to do so.[36]

Impact upon U.S. Forces. Despite the claims in his autobiography, General Schwarzkopf was not entirely successful in his policy of restricting the display of symbols and calling chaplains "morale officers"—it had a negative impact and caused resentment within Central Command.[37] The *New York Times* reported that "the rules have disturbed some American soldiers and sailors, who say they resent that any prohibitions have been put on their religious freedom, especially in a country that they are now being asked to defend with their lives."[38] One soldier said, "I'm not a troublemaker, and I don't want to offend Moslems or anyone else. It just seems wrong to me that Americans who have come to defend the Arabs should be asked to sacrifice our traditions and beliefs."[39]

The issues were hotly debated in the theater of operations and in the United States. The senior Marine chaplain present voiced his frustration to the CentCom chaplain: "I was not sent here to be a P[rotestant]-Morale Officer. My denomination did not educate me to be a P-Morale Officer. And the Chaplain Corps didn't ordain me to be a P-Morale Officer. And I was not sent over here to be the senior Marine P-Morale chaplain in country. I am who I am and these Marines are who they are and they've been sent here and they're going to die, perhaps, in this country to defend it to give them the right to be who they are. And I think we should have the right if we're going to die, to die as who we are, Chaplain."[40]

The CentCom chaplain affirmed these misgivings. "Taking off branch insignia and referring to a chaplain as a 'Morale Officer' had a negative impact on the morale of service members, the American public and the Chaplains. In addition, it raised serious questions regarding U.S. Public Law."[41] There were further problems, as he was to observe later, with respect to "constitutional issues, the insignia being our way of identifying ourselves to our parishioners, and personal conviction."[42] The directive to call chaplains "morale officers" was officially revoked on 1 January 1991.

No chaplain had been assigned to the CentCom staff during the opening stages of Desert Shield, and until Colonel Peterson arrived the lack of a chaplain contributed greatly to confusion in religious policies for U.S. forces. Initially "some service members were not allowed to bring Bibles and religious symbols, [and] some were required to change their religious preference on 'dog-tags.'" Contradictory directives were published, some in violation of church law of various denominations, and erroneous information was disseminated.[43] The

results included negative media coverage and dissatisfaction among the troops and leaders of faith groups. The media reported, "It is not even clear whether there is a policy. Rumors and confusion abound on the subject. Some officers say the Pentagon has issued a flat order barring the open practice of religion. Others insist there is no such edict, only a general advisory that Saudi 'sensitivities' should be respected."[44]

Despite such initial problems, the ministry to U.S. forces throve. Many sought and found the comfort that faith brings in the face of death. Attendance increased dramatically at worship services, Bible studies, prayer meetings, prayer breakfasts, and fellowship groups. Many were baptized, rededicated their lives to God, or became more active in their faith.

American Public Opinion. Letters from soldiers and media reports had wide influence. During Desert Shield, especially during the holidays in November and December, much was written about religious issues. Though media representatives were not allowed to talk to chaplains or cover worship services, many service members expressed their concern over the religious restrictions, and the media reported this to the American public. An editorial in the *Washington Post* commented on the "insignia" and "morale officer" issues and the restrictions on worship. It concluded, "All this bears careful watching. Saudi Arabia has its own culture, standards and strongly held religious beliefs, and it stands in a special place in the Moslem world. The United States does not seek to challenge any of this but must insist that Americans in the military be protected in the full exercise of their religions. That constitutional right travels with the troops and must be respected wherever they serve."[45]

The possibility existed that public support for Desert Shield and Storm might have eroded due to restrictions on worship and related resentment toward the Saudi government. The U.S. military had a difficult task explaining the policy and convincing the American public that its troops were still able to worship.

War with Mexico

An early example in American history of religious belief affecting the theater of operations was the war with Mexico from 1846 to 1848. This conflict had religious implications for both the United States and Mexico. American troops initially entered Mexico without any chaplains assigned to tactical units, even though "the war was seen by many as a crusade by Protestant America to subdue Catholic Mexico."[46] This worked to the Americans' disadvantage when the Mexican press, both secular and religious, tried to manipulate the religious sensitivities of both sides to degrade the effectiveness of the U.S. Army. Mexican propaganda portrayed the clash as a religious war, with the American objective

being to "confiscate church property and destroy Catholicism."[47] Herman A. Norton notes the Mexican purpose for the distortions: "First, to incite Mexicans to resist the American military as a matter of religious duty; and second, to disturb or upset Catholic soldiers in the American Army, even to the point of considering desertion."[48]

This propaganda alarmed President James K. Polk and his advisors, who recognized the danger in this conflict being portrayed as a religious war. They were concerned not only about the effect upon the Mexican population but also about how Catholics, who constituted one-fourth of the regular soldiers in the U.S. Army, would react. Polk, upon the advice of his secretary of state, James Buchanan, decided to send two Catholic priests as chaplains to General Zachary Taylor's army. He reasoned that the appointment of the two priests would allay the fears of Catholic soldiers and civilians, while showing that "the government possessed no anti-Catholic bias and had no intention of destroying churches and warring on religion in Mexico."[49] No Protestant chaplains were appointed to the Army, in order to emphasize that this was not a "Protestant crusade."

After receiving Army commissions, Fathers John McElroy and Anthony Rey joined General Taylor near Matamoras, Mexico, on 6 July 1846. McElroy remained at the base hospital while Rey was assigned to the combat troops. In addition to his duties ministering to the sick and wounded, McElroy organized a school for the local Mexican children and taught there four hours a day. When Mass was offered to the American soldiers, McElroy also served Mexican civilians. He hoped that his actions would help counter Mexican propaganda about Americans.

Rey, meanwhile, served with distinction during the siege of Monterrey in September 1846 with his ministry to the wounded. Reports of his efforts even found their way into the American press, when letters home from soldiers at the front were published. In January 1847, Chaplain Rey and a companion were assassinated by Mexican guerrillas as they travelled to Matamoras. News of his death shocked the local village; most of its inhabitants went out to recover the remains and bury them in the local cemetery.

In February 1847, Congress authorized the appointment of additional chaplains to Army tactical units in Mexico. This was due in part to the "impressive reports and letters sent by officers and soldiers commending the valuable service" of McElroy and Rey.[50]

Vietnam

The Vietnam War is a more recent example of a conflict in which religious belief affected all the combatants. The Vietnamese culture was radically unfamiliar to most Americans. The Vietnamese do not distinguish between the

"secular and sacred," as many Westerners tend to do; a Vietnamese life is affected much more by religion than is the typical American's. Robert L. Mole comments about the Vietnamese culture: "Just as life is composed of interwoven facts, just so do religious belief systems undergird and control their daily life to an amazing degree. Thus many Vietnamese unconsciously and culturally blend elements of Taoism, Confucianism, Buddhism, Hinduism, Islam, and Christianity with animism into a way of life. The monistic Westerner reacts by rejecting philosophies that do not fit into his 'frame of reference' through a determination that if one concept is correct, the others must be wrong. The pluralistic Vietnamese adopt, adapt, and utilize acceptable elements within all the contrasting philosophical concepts without apparently or consciously sensing any inconsistency. This fundamental difference of viewpoints must be understood and appreciated if citizens of the two cultures are to build lasting friendship and effective rapport."[51]

Further complicating matters was the ethnic mix of the South Vietnamese people. The ethnic Vietnamese dwelt in the lowlands, the plains in the valleys and the river deltas. The second major ethnic group lived in the mountains and highlands. Known as Montagnards, the group consisted of thirty-three tribes, each with distinct variations in "customs, mores, and religious beliefs which make it different from its neighbors."[52] The Montagnards made up only a small percentage of Vietnam's total population, but they were of strategic importance because they were the "primary inhabitants of about 50 percent of Vietnam's land area."[53] This cultural and religious diversity posed an immense challenge to all combatants as they struggled to accomplish their military objectives.

The sensitive issue of religion was difficult for the communist forces in the South, because their reputation for anticlericalism stood in opposition to their public support of religious freedom. The National Liberation Front (NLF) tried to infiltrate, neutralize, or win over religious groups. Although it had some success, it was looked upon with suspicion by many, such as the Ong Ba, an indigenous peasant religion. Similarly, "Catholic memories of conflict with the [Communist] Party were too powerful to overcome."[54] The anticommunist attitude of the Hrey tribe, a Montagnard ethnic group, was primarily due to religious differences. A May 1966 report traced this attitude "to 1954 when the communists attempted to put a stop to buffalo sacrifices," which were a vital part of the Hrey animist religion. The Hrey had so resented this episode that they attacked the communists with crossbows and spears.[55]

These difficulties did not prevent the communist forces from trying to use religious belief to their advantage. They studied the various religious beliefs in order to disrupt joint South Vietnamese–American efforts. The communists used the alliance ritual of the Cua, another Montagnard ethnic group, to discourage tribesmen from entering alliances against them. "While only a few Americans

have been so 'adopted,' subversive agents have used the Cua adoption alliance to their good advantage. Since religious value systems and taboos in a spirit-controlled environment are involved, Cua tribesmen feel it impossible to break their pledge and fight once these alliances have been formed."[56]

The communists also used religious beliefs to wage psychological warfare against the local population. A U.S. Navy training manual explained, "Beliefs arising within Animism give rise to the demand that proper disposal of the dead be made to avoid creating a wandering spirit. It is the same religious concept that encourages the mutilation of corpses by the enemy. This has psychological impacts not fully appreciated by Americans."[57] Village elders would often be kidnapped and threatened with decapitation if family members did not conform to communist wishes. Their families feared that decapitation "would separate that ancestor's soul to wander aimlessly in the afterlife without ascending in the family order."[58]

By the same token, the South Vietnamese government had trouble dealing with the religious diversity within its borders. In 1955, Ngo Dinh Diem turned against two religious sects, the Cao Dai and Hoa Hao, as he consolidated power and eventually proclaimed himself president of the new government. His regime and those that followed it lacked legitimacy because they were seen by the peasants as a continuation of French colonial rule. "South Vietnam's urban elite possessed the outward manifestations of a foreign culture and often professed an alien faith."[59] The composition of the military leadership mirrored this weakness of the government. "Concerning South Vietnamese leadership, there was a real difference between officers and men. The officers were urban, spoke French, and were often Catholic. The soldiers were rural Buddhists."[60]

Diem further alienated much of the rural population through village relocation. In 1962 he launched the Strategic Hamlet Program, designed to concentrate the rural population in villages protected against the communist forces. It was also hoped that this would be an effective tool to cut off the NLF from local support. The program was resented by many peasants who for religious and economic reasons did not want to leave their homes and land. The Ong Ba, like other groups, stressed "ancestor worship and the veneration of grave sites, and removing the family from their ancestors was therefore a blasphemous act."[61]

The downfall of Diem's government was caused, in part, by his inability to handle protests of the Buddhist community. On 8 May 1963, nine people were killed in a demonstration at Hue. Buddhist monks then shocked the world by burning themselves in protest against the Diem government. On 21 August the government raided twelve Buddhist temples and arrested over 1,400 Buddhists. On 1 November, Diem was killed and his government overthrown, with tacit American approval.[62] Only the Catholic Vietnamese community mourned Diem's death.

The problems of religious diversity facing the South Vietnamese government confronted U.S. forces as well. South Vietnamese policy decisions, coupled with a "strange" culture, proved difficult obstacles for the American military. This was highlighted in March 1965 during a Marine Corps training exercise, Operation SILVER LANCE. This evolution simulated problems that could arise when military members were not aware of the religious and value systems a foreign society embraced. "This exercise demonstrated that such a lack of information can create alienation of local peoples, a decrease in security, and a potential increase in casualties."[63] The arrival of Marine combat units in March 1965 also emphasized a need for a more comprehensive indoctrination program. "It became readily apparent that an extensive program of lectures and discussions on the influence of Buddhism, Confucianism, Taoism, and other indigenous religions on the life of the people was necessary."[64]

As a result of SILVER LANCE, the Southeast Asia Religious Project was established, in which a Navy chaplain was directed to study beliefs, customs, and religious practices. Chaplain Robert L. Mole was assigned from August 1965 to July 1966 to collect and prepare "materials suitable for use in orienting Navy and Marine Corps personnel in Vietnam."[65] The fruit of this research was to be shared with the other services as well.

Much of what was learned was relayed to American service members. New arrivals to III Marine Amphibious Force received two lectures, "Religions of Vietnam" and "Religiously Based Customs of Vietnam." Numerous publications about Vietnamese religions and culture were printed. One of them, NAVPERS 15991, provided "Guidelines for Understanding" for military personnel: "*Do* Treat Temples, Spirit Houses, Sacred Places Carefully" and "*Don't* Tamper With Sacred Objects Without Direct Orders" were two important points arising from Vietnamese ancestor worship and fear of angering the spirits. Americans were told not to remove "spirit poles," which, "like the desecration of graves and molestation of spirit houses, can create potentially dangerous antagonism among those who might otherwise be our friends."[66]

Americans were also reminded that their own culture was as strange to the Vietnamese as theirs was to the Americans: "*Remember* That Cultural Differences May Bewilder Both Vietnamese And Americans. . . . American culture is often perceived as active, material, and logical, while that of the Vietnamese is primarily passive, spiritual, and mystical."[67] How effective the services were in teaching their people about Vietnamese culture is open to debate. Bergerud notes that "for reasons not at all apparent in retrospect, the army did almost nothing to prepare soldiers for the 'culture shock' (and the term is a good one) that all of them encountered when coming to Vietnam. Almost all of the veterans . . . stressed how totally ignorant they were about the Vietnamese and their culture. They were also unprepared for the poverty of Vietnam. Initial reactions

were usually a mixture of curiosity and disgust."[68] New arrivals were indoctrinated on Vietnamese culture. For whatever reason, this indoctrination seems to have been ineffective. The lessons of SILVER LANCE were confirmed: American ignorance or indifference did indeed alienate the Vietnamese, decrease security, and increase casualties.

Military Operations Other Than War

U.S. military commanders must concern themselves today with operations not principally involving combat. Many will prominently feature religious practices and requirements. As an illustration of such concerns, let us examine a recent case of considerable duration and media interest.

Operation GTMO was the American response to the large number of refugees fleeing Haiti, in which refugees were placed in camps at the U.S. naval station at Guantanamo Bay (known for decades to servicemen as "GTMO," or "Gitmo"), Cuba. Chaplains played a vital role. The Joint Task Force (JTF) Commander, Brigadier General Kenneth W. Simpson, U.S. Army, was convinced that chaplains and their assistants were integral to the mission. He asked for additional chaplains and assistants to support the 12,500 Haitians and 1,500 U.S. military and civilian personnel.[69] He considered them important because of "the significance of the spiritual dimension of the Haitian culture."[70]

Chaplains proved crucial in providing support to the Haitians. They conducted a minimum of two worship services and one Bible study per day, per camp. Worship services tended to be long and well attended, providing a constructive outlet for people of faith with little else to do. Chaplains also performed a number of other functions in the camps: they facilitated communications; clarified rumors; explained American civilian control and processing procedures; distributed clothing, Bibles, and religious literature; assisted in reuniting families; taught English as a second language; and counselled.

Chaplains also served as liaisons between the refugees and U.S. military and civilian officials. In general, because of their own experience, Haitians feared the military; but they considered the chaplains, as clergymen, trustworthy. The JTF Command Chaplain reported to General Simpson that "chaplains continue to have a significant impact on the character of the migrant camps. Many sources reported that on several occasions chaplains have facilitated two way communications during demonstrations, helped defuse tense situations and assisted in restoring calm during disturbances. Their role as religious leaders gives them credibility and status with the Haitian migrant community. They are viewed as reliable, objective sources of information and as peacemakers."[71] The role of chaplains as peacemakers was an important one. The JTF Command Chaplain reported later that "due to continued disruptions and rock throwing incidents

in some camps, the [Armed Forces] Commander has asked for additional chaplain support and presence in the camps."[72] Chaplains also attended "town meetings" to listen to the refugees' concerns.

Chaplains were placed on Coast Guard cutters, where they did "double duty." They accompanied the Haitians who were being repatriated to Port-au-Prince, counseling the refugees facing this disappointing and difficult transition. The chaplains also provided a ministry to the crews of the cutters. The JTF Command Chaplain noted that "the JTF Chaplain and Coast Guard Chaplain (Commander) Bob Adair met with cutter captains and staff to coordinate religious coverage. Their concern was not only chaplains assisting the management of migrants but expanded to include concerns for the welfare of their crews. Perhaps due to the stress and lengthy tours of duty there has recently been more than one suicide attempted."[73]

Direct support to military personnel was also an important part of the JTF chaplains' duties. A full chapel program and chaplain services were provided to service members. Chaplains also helped military personnel deal with the stress of Operation GTMO, gave Haitian cultural instruction to new arrivals, and "return/reunion" briefs to department personnel. The JTF Chaplain also advised the commander on morale trends, food problems, potential points of tension, and what was working well in the camps.[74]

These examples have been offered to elaborate and underscore the truth of the opening words of a recent Joint Publication: "Religion plays a pivotal role in the self-understanding of many people and has a significant effect on the goals, objectives, and structure of society. In some cases, religious self-understanding may play a determinative or regulating role on policy, strategy, or tactics. It is important for the joint force commander (JFC) to have an understanding of the religious groups and movements within the theater and the potential impact that they may have on the accomplishment of the assigned mission."[75]

Touching the lives of countless people throughout the world, religion can be both intensely personal and notably political, its effects extending from individual motivation to national or group goals, strategies, and decisions. While the role of religion is difficult to quantify, the wise commander will carefully study its effects on military operations.

Notes

1. George C. Marshall, quoted in Donald W. Shea, "A Ministry in the Eye of the Storm," *Army*, September 1991, p. 54.

2. Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton Univ. Press, 1984), p. 137.

3. Ibid.

4. See Antoine-Henri de Jomini, *The Art of War* (Westport, Conn.: Greenwood Press, 1977), chap. 1 and art. 9, pp. 12, 31.

5. U.S. Defense Dept., *Joint Operation Planning and Execution System*, Joint Pub 5-03.1 (Washington: Joint Staff, 4 August 1993), p. P-6-2.

6. Ibid., p. P-3-4.

7. Walter A. Ewell, ed., *Evangelical Dictionary of Theology* (Grand Rapids, Mich.: Baker Book House, 1984), p. 931.

8. Stephen L. Carter, *The Culture of Disbelief* (New York: Basic Books, 1993), pp. 41–2. (Emphasis original.)

9. Ralph Peters, "Vanity and the Bonfire of the 'isms,'" *Parameters*, Autumn 1993, pp. 40–1. Peters argues, for instance, that in the Balkans the political and religious elements are almost inseparable. (Emphasis original.)

10. For a detailed discussion, see ibid., p. 43.

11. John J. Mearsheimer, "Disorder Restored," *Rethinking America's Security: Beyond Cold War to New World Order*, eds. Graham Allison and Gregory F. Treverton (New York: W.W. Norton, 1992), p. 221.

12. *Joint Operation Planning and Execution System: Vol. 1, Planning Policies and Procedures*, Joint Pub 5-03.1 (Washington: Joint Staff, 4 August 1993), p. P-6-1.

13. U.S. Army Dept., *Religious Support Doctrine*, FM 16-1 (Washington: November 1989).

14. Bernard Lewis, "The Roots of Muslim Rage," *The Atlantic Monthly*, September 1990, p. 54.

15. David Wurmser, "The Rise and Fall of the Arab World," *Strategic Review*, Summer 1993, p. 35.

16. U.S. Defense Dept., *Doctrine for Joint Operations*, Joint Pub 3-0 (Washington: Joint Staff, 1 February 1995), p. VI-4. (Emphasis omitted.)

17. Telephone conversation with Capt E. F. Blancett, CHC, USN, U.S. European Command, 25 January 1995.

18. Sandra Mackey, *Lebanon: Death of a Nation* (New York: Congdon and Weed, 1989), p. 204.

19. Kevin B. Smith, "Moral Disruption by Maneuver," *U.S. Army Aviation Digest*, March/April 1990, pp. 2–10.

20. Ibid., p. 3, footnote 1.

21. Cole C. Kingseed (Lt. Col., USA), "The Battalion Chaplain," *Infantry*, July-August 1991, p. 16.

22. H. Norman Schwarzkopf with Peter Petre, *It Doesn't Take a Hero* (New York: Bantam, 1993), p. 388.

23. Shea, p. 54.

24. Susan Sachs, "A Christmas under Wraps: Troops Religious Rites Are Muffled to Not Offend Muslim Hosts," *Newsday*, 23 December 1990, p. 17.

25. Patrick J. Sloyan, "U.S. Troops Avoid Moslem Wrath; Saudis Fear Defiling of Holy Sites," *Newsday*, 4 October 1990, p. 13.

26. "Hussein Vows to Miss Deadline," *New York Times*, 22 December 1990, p. 7.

27. For coalition targeting policies, see U.S. Dept. of Defense, *Conduct of the Persian Gulf War: Final Report to Congress* (Washington: 1992), pp. 132–3.

28. Colin Nickerson, "GIs in Desert Follow Faith in Furtive Way," *The Boston Globe*, 12 December 1990, p. 1.

29. Sloyan, p. 13.

30. Schwarzkopf, p. 388.

31. Telephone conversation with Chaplain David Peterson (Col., USA), Forces Command Chaplain, Fort McPherson, Ga., 3 February 1995. Chaplain Peterson served as CentCom Chaplain during Desert Shield and Storm.

32. Schwarzkopf, p. 389; Peterson, 3 February 1995.

33. USCINCCENT message, date-time group 121957Z September 1990, "Command Policy for the Administration of Religious Support Operation Desert Shield" [Unclassified].

34. Peterson, 3 February 1995; Editorial, "Religion and Desert Shield," *Washington Post*, 11 November 1990, p. A30; Philip Shenon, "Standoff in the Gulf: Out of Saudi View, U.S. Force Allows Religious Their Rites," *New York Times*, 22 December 1990, p. 1; and Nickerson, p. 1.

35. Schwarzkopf, p. 430.

36. Chaplain David Peterson (Col., USA), "After Action Report: Operation Desert Storm," briefing to the Armed Forces Chaplain Board, Washington, D.C., summer 1991.

37. Schwarzkopf, p. 389.

38. Shenon, p. 1.

39. Nickerson, p. 1.

40. Oral history of Captain Tom Hiers, CHC, USN, Chaplain Resource Board, Norfolk, Va., 11 January 1995. "Marine chaplains" are in fact naval officers of the Chaplain Corps (CHC) assigned to Marine units.

41. Peterson, briefing.

42. Peterson, 3 February 1995; "Religion and Desert Shield"; Shenon, p. 1; and Nickerson, p. 1.
43. Peterson, briefing.
44. Nickerson, p. 1.
45. "Religion and Desert Shield."
46. Herman A. Norton, *Struggling for Recognition: The United States Army Chaplaincy, 1791–1865* (Washington: Office of the Chief of Chaplains, Dept. of the Army, 1977), pp. 64–5.
47. Ibid., p. 66.
48. Ibid.
49. Ibid.
50. Ibid., p. 73.
51. Robert L. Mole (Cdr., CHC, USN), "A Brief Survey of the Phat-Giao Hoa-Hao of Vietnam," Southeast Asia Religious Project, 1969, p. xii.
52. Robert L. Mole (Cdr., CHC, USN), *Peoples of Tribes of South Vietnam* (Saigon: COMNAVSUPPACT Saigon, Summer 1968), p. 7.
53. Ibid.
54. Eric M. Bergerud, *The Dynamics of Defeat: The Vietnam War in Hau Nghia Province* (Boulder, Colo.: Westview Press, 1991), pp. 52, 66.
55. [Robert L. Mole (Cdr., CHC, USN)], "The Montagnards (Tribes-People) of I Corps, South Vietnam," Southeast Asia Religious Project, May 1966, p. I-18.
56. Mole, *Peoples of Tribes of South Vietnam*, pp. 186–7.
57. U.S. Navy Dept., *The Religion of South Vietnam in Faith and Fact*, NAVPERS 15991 (Washington: Bureau of Naval Personnel, 1967), p. 5.
58. Jim E. Fulbrook (Capt., MSC, USA), "LAMSON 719, Part I: Prelude to Air Assault," *U.S. Army Aviation Digest*, June 1986, p. 11.
59. Bergerud, p. 3
60. Richard O'Hare, quoted in Bergerud, p. 230.
61. Bergerud, p. 52.
62. Guenter Lewy, *America in Vietnam* (New York: Oxford Univ. Press, 1978), pp. 26–7.
63. NAVPERS 15991, p. v.
64. Herbert L. Bergsma (Cdr., CHC, USN), *Chaplains with Marines in Vietnam, 1962–1971* (Washington: Headquarters U.S. Marine Corps, 1985), p. 100.
65. Ibid., p. 101.
66. NAVPERS 15991, pp. 91–7.
67. Ibid, p. 95.
68. Bergerud, p. 170.
69. U.S. Atlantic Fleet memorandum 1331 serial N02C of 18 May 1992.
70. Ibid.
71. CJTF GTMO memorandum serial JTF-CH of 10 June 1992.
72. CJTF GTMO memorandum serial JTF-CH of 17 June 1992.
73. Ibid.
74. U.S. Atlantic Fleet memorandum 1331 serial N02C of 18 May 1992.
75. U.S. Dept. of Defense, *Religious Ministry Support for Joint Operations*, Joint Pub 1-05 (Washington: Joint Staff, 3 August 1993), p. I-1.

Ψ

Erratum

Our announcement in the Autumn 1995 ***Review*** *(page 42) of the Second International Congress of Maritime History in June 1996 gave an incorrect address for the sponsor, the Netherlands Association for Maritime History. Those interested should write to: (Mrs.) Corrie Reinders Folmer, Box* ***102****, 2350 AC Leiderdorp, The Netherlands.*

IN MY VIEW. . .

"The Navy's Search for a Strategy, 1945–1947"

Sir:

Robert Fisher has done us all a service in his Summer 1995 *Naval War College Review* article, as well as his Spring 1995 "Set and Drift" contribution, "The Ad Hoc Nature of Policy-Making: The *Missouri* Visit to Turkey." Fisher explores the U.S. Navy's search for a strategy in the two years following World War II—exactly half a century ago—in part because, as he notes, "in certain ways, the naval officers of that postwar era had to address an intellectual challenge clearly similar to that faced by those of today." Fisher is right. We need more study of earlier periods of international and naval transition.

Fisher, however, does not do justice to the alacrity and judgment of the U.S. naval officers of that period in meeting their challenge, using traditional U.S. naval concepts of forward presence and recent wartime experience in carrier striking fleet operations. Accordingly, Fisher does not understand some important aspects of the similarities between the officers of those years and the officers of the Navy of the 1990s.

Specifically, Fisher slights the speed and extent to which the Navy turned its face toward the problems of Europe, the Mediterranean, and the North Atlantic in late 1945 and early 1946. He also downplays the speed and extent to which the Navy's leadership in that period was able to apply traditional principles of U.S. naval thought and wartime lessons to the new world situation.

Fisher opens his article by stating, "In late 1945, the United States Navy confronted a postwar world wholly unlike the strategic situation for which it

had, for decades, planned. . . . Suddenly there was no obvious threat, no maritime foe, around which U.S. naval thinking could crystallize—not at least in a form anything like what had long been familiar." Later on, he asserts that "as relations with the Soviets deteriorated, United States foreign policy focused on the 'Northern Tier' states of Greece, Turkey and Iran; but the overwhelming preponderance of naval forces, as well as most of the tactical thinking and operational perspectives, and most leading admirals outside of Washington, were still in the Pacific."

I would argue strongly that the actual U.S. Navy record was far better than that, thanks to a body of existing U.S. naval strategic thought that stressed (1) the importance of global forward naval presence in time of peace, and (2) the preparation of forward-deployable carrier striking fleets for the eventuality of war. This body of thought was based both on traditional U.S. Navy views of forward presence and the Navy's most recent wartime fleet experience.

It is true that the U.S. Navy in 1945 rapidly drew down its force and base structure in Europe and the Mediterranean, at first to fuel the final campaigns of the Pacific War and then to begin the inevitable process of postwar demobilization. Nevertheless, at the same time the Navy also made other, more crucial decisions signifying the continued postwar importance of the European theater:

• Unlike after World War I, the U.S. Navy continued to maintain a major forward theater headquarters in London, with new *operational* responsibilities for Mediterranean and European waters, despite the end of the war in Europe and even after the war in the Pacific had ended.

• Just two days after the surrender of Japan, it replaced the World War II U.S. naval commander in Europe, former Chief of Naval Operations Harold Stark (a non-operational naval diplomat), with an admiral of similarly high seniority but with impeccable combat credentials—Admiral H. Kent Hewitt, veteran commander of the landings in North Africa, Sicily, Italy, and the south of France.

• The Navy continued to occupy, use, and advocate as vital the forward U.S. naval air base established during the war at Port Lyautey, Morocco—a permanent U.S. Navy postwar base on the Eastern side of the Atlantic, hard by the entrance to the Mediterranean.

• The Navy replaced the aged cruiser *Memphis* in the Mediterranean with the brand-new light cruiser *Providence* in November 1945.

Providence, incidentally, was not the only new warship in 1945 and 1946 to be deployed to the Atlantic and then later to the Mediterranean upon commissioning. The same was true of the large aircraft carriers—*Franklin D. Roosevelt* and *Midway*—and dozens of others. Twice as many warships commissioned in late 1945 and early 1946 went to the Atlantic than to the Pacific. And hundreds of Pacific Fleet ships began to transfer to the Atlantic as well, once Japan had

surrendered—ninety-nine in September, 120 in October, and eighty in November ("Command Narrative of the United States Atlantic Fleet, 1 September 1945 to 1 October 1946," U.S. Naval Historical Center). The veteran carriers *Randolph* and *Wasp* and the battleship *Missouri* were on the East Coast of the United States as early as the end of October 1945. The U.S. Navy of late 1945 hardly neglected the Atlantic-European area, despite the demands of the just-ended Pacific War and despite the traditional predominance of its ally, the Royal Navy, in European waters.

Moreover, the U.S. Navy understood full well what its responsibilities should be in an unsettled early-postwar era with no clear enemy having emerged: *global forward presence*. Two months after arriving in London, Hewitt visited the capitals of recently liberated Scandinavia to impress upon its leaders the continued interest of the United States, backed up by its Navy, in their recovery from wartime devastation. A month later, he wrote to the CNO in Washington urging him to send *additional* U.S. naval forces to Europe, to provide a forward naval presence in northern European waters akin to that provided by the cruiser and two destroyers in the Mediterranean (and little different from the forward naval presence exerted in Europe up to 1940 by the U.S. Navy's Squadron 40-T). In December 1945, in consultation with the U.S. ambassador to Greece, Hewitt expanded his area of operations beyond that of the World War II U.S. Navy in Europe by sending *Providence* for the first time to the eastern Mediterranean, to visit Athens, just as Soviet pressures on Greece, Turkey, and Iran were intensifying. ("Narrative of U.S. Forces, Europe, 1 September 1945 to 1 October 1946," U.S. Naval Historical Center. For Squadron 40-T, see Willard C. Frank, Jr., "Multinational Naval Cooperation in the Spanish Civil War, 1936," *Naval War College Review*, Spring 1994, p. 89ff; Edward E. Conrad (Capt., USN, Ret.), "An Ensign's First Ship," *Shipmate*, June 1993, pp. 20–2; and Adam Siegel, "The Tip of the Spear: The U.S. Navy and the Spanish Civil War," Center for Naval Analyses, unpublished paper, 1992.)

In January 1946, as requested, the CNO ordered an additional cruiser and two more destroyers to Europe; they arrived in the United Kingdom in February. That same month, the discussions took place in Washington that would result in the April 1946 visit of *Missouri* to Istanbul and Athens cited by Fisher. By March 1946 communist pressures on Greece, Turkey, and Iran had intensified even more, but the U.S. Navy was ready to respond. (The force accompanying *Missouri* to the eastern Mediterranean included the upgraded forward U.S. Navy Mediterranean squadron and the new forward northern European squadron, already in-theater, so *Missouri* hardly arrived in the eastern Mediterranean alone.)

Missouri was also backed by the power of a forward-deployable carrier striking fleet for the Atlantic and Mediterranean—the reconstituted Eighth Fleet. The Eighth Fleet had been established under the Atlantic Fleet as early as December

1945, only four months after the surrender of Japan. Vice Admiral Marc Mitscher—arguably the Navy's preeminent battle force commander—had been chosen to command it. In September, a few weeks after Japan surrendered, Mitscher had (as Fisher points out) advocated that the U.S. Navy keep the preponderance of its forces in the Pacific. Nevertheless, by December he was hard at work on the problems of projecting naval power across the Atlantic.

Mitscher's short-lived advocacy of a U.S. Navy Pacific "tilt" was rooted in his view that a medium-sized and benign force—the Royal Navy—would dominate in the eastern Atlantic and Mediterranean while no such force would be available in the western Atlantic or the Pacific (Theodore Taylor, *The Magnificent Mitscher*, 1954, pp. 315–6). This was a view widely shared at the end of the war by U.S. Navy—and Royal Navy—officers, and it was consonant with U.S. Navy thinking for much of the preceding three decades. (This did not, however, prevent Admiral Raymond Spruance at the Naval War College from studying operations against Britain as well as Russia in June 1946; the Naval War College of the period viewed the world's great powers as hypothetical game opponents, not actual political adversaries [Letter from Adm. Spruance to Fleet Adm. Nimitz, 19 June 1946, 00 files, U.S. Naval Historical Center].)

The British Empire had finished the war as the world's third superpower. How hollow that power was and how rapidly it would wane were apparent to few in late 1945. As Britain's economic and military decline grew more evident, however, the U.S. Navy was as quick to fill the vacuum as the rest of the U.S. government, especially in the Mediterranean. By the time President Truman signed the British Loan Act in July 1946, the U.S. Navy had already doubled its own permanent V-J Day force structure in Europe and was planning to increase it even more.

The other superpower, the Soviet Union, was hardly a nation with which most U.S. naval officers had ever felt very comfortable. Still, there had been a war on in 1944 and 1945, a war in which the United States was allied with the Soviets in Europe and was bringing them in as allies in the Pacific as well. Unlike a nation's political leadership (e.g., Secretary of the Navy James Forrestal), a navy at war focuses primarily on current operations, not future geostrategic planning. Consequently, up until V-J Day the chief concern of U.S. naval officers regarding Russia was how to work with it more closely in the Pacific, not how to oppose it more sharply in Europe. For six months in the spring and summer of 1945, the U.S. Navy was actually training Soviet combat crews—about 12,400 men—in the operation of 149 naval vessels planned for transfer to the Soviet Pacific Ocean Fleet (Richard A. Russell, "The Hula Operation," in Fern Chandonnet, ed., *Alaska at War*, 1995). Once, however, hostilities ceased against Japan, the U.S. Navy made changes in its thinking that appear breathtakingly swift in retrospect. Mitscher's September 1945 Pacific orientation was aimed at

possible confrontation there with Russia, believing as he did that the Royal Navy could handle things against Russia in Europe (Taylor).

Mitscher was made a four-star admiral and established the Eighth Fleet in Norfolk on 1 March 1946. To make this happen so quickly, he had brought with him his equally operationally adept former deputy from the Pacific, Captain Arleigh Burke. Mitscher conducted its first at-sea exercises off the East Coast and in the Caribbean in April and May, commanding from *Franklin D. Roosevelt*, with *Midway* also deployed. (There were no battleships except *Missouri*, recently returned from the Mediterranean: Mitscher despised battleships.) The president attended (Taylor). The exercise made all the papers, at home and abroad. Also, earlier, in March, another Atlantic Fleet exercise had been conducted in the Labrador Sea by a task force organized around *Midway*. This deployment had also been widely reported, as an Arctic cold-weather exercise. (See, for example, the *New York Times*, 17 March 1946, p. 3.)

Remember, this was 1946. The idea of major, fully ready main battle fleets permanently deployed far forward—like today's Fifth, Sixth, and Seventh Fleets—was just being born, in the minds of civilian and uniformed U.S. naval leaders. Fleets up to that time had normally demonstrated their power by holding highly publicized exercises in or near home waters. So the Eighth Fleet maneuvers, despite taking place in the Western Hemisphere, did send the desired signal, in the context of the times.

These evolutions were no cakewalks—the rapid demobilization had gutted the Navy's personnel readiness—but they did their training and diplomatic jobs sufficiently. And, being operational exercises, they were far more demanding for the carriers than a show-the-flag deployment to the Mediterranean with *Missouri* would have been. The leadership of the Navy had shown itself intellectually prepared for the new challenges of the postwar world, even if the political requirements of demobilization prevented the leaders from giving full play to their intellects.

Moreover, the Navy on 19 March had announced to a congressional committee that the active fleet was now split between 158 ships in the Pacific and 133 in the Atlantic (House Naval Affairs Committee Hearings, 79th Congress, 2nd Session, 2745). This was only seven months after the Japanese surrender, with the U.S. Navy still responsible in the Pacific for occupation duties in and around Japan, Korea, the Philippines, Indochina, and the Pacific islands, as well as China, where civil war was raging around the new U.S. Navy and Marine base at Tientsin.

Even the Navy's Marines—for so they were in 1945 and 1946—began to plan for operations in the Atlantic and Mediterranean. Despite their heavy engagement in north China, the Marines nevertheless formed a new special expeditionary brigade at Quantico, Virginia, as early as January 1946. That

brigade was part of the May exercises in the Caribbean—the only major Marine training mission anywhere that year. And in the summer of 1946, the Second Marine Division moved from Japan to Camp Lejeune, North Carolina (Benis M. Frank and Henry I. Shaw, Jr., *Victory and Occupation*, Historical Branch, Headquarters Marine Corps, 1968, p. 468).

Thus the U.S. Navy was ready for the challenges of the Soviet-instigated crises of the spring and summer of 1946. Indeed, the twin strategic concepts of global, peacetime forward presence and surge of carrier striking fleets for wartime had made her more ready for those challenges than any other element of the government. U.S. Navy forces were on scene in sufficient numbers to help defuse the Trieste crisis of the summer of 1946. In June 1946, the Navy sent one its most experienced politico-military and strategic planning specialists, Bernhard Bieri, to take over the naval forces in the Mediterranean from Jules James. James had been a rear admiral; Bieri was a vice admiral (Bieri and James biographies, U.S. Naval Historical Center). In July, Admiral Hewitt sent six cruisers and destroyers on high-profile, forward naval presence operations in and around Scandinavia, the Low Countries, and the United Kingdom ("Narrative of U.S. Forces, Europe, 1 September 1945 to 1 October 1946," U.S. Naval Historical Center).

Meanwhile, plans were being made in Washington to send *Franklin D. Roosevelt* on a Mediterranean cruise in the late summer and early fall. In August 1946, Mitscher, Burke, Vice Admiral Forrest Sherman, and Captain George Anderson—four of the best strategic and operational thinkers in the U.S. Navy—toured European capitals to learn first-hand what they were up against (Taylor; E. B. Potter, *Admiral Arleigh Burke*, 1990, pp. 278–89). By September, Mitscher was in command of the entire Atlantic Fleet, while the brilliant Admiral Richard Conolly (one of the "new breed" of young combat veterans cited by Fisher) had relieved Hewitt in Europe.

One deficiency was obvious, but it was being rapidly corrected. As Fisher points out, the attack aircraft available to the U.S. Navy for use in the Pacific against Japan could not project power far enough inland, especially against the Soviet Union. Consequently, in mid-1945 the Navy had asked industry to develop a long-range heavy bomber, and in June 1946 a contract was let to build the first aircraft, now redesigned to be nuclear-capable—the AJ Savage. (The Savage was flying in a squadron less than four years later. Deployed as intended to the European theater, it did not see action in Korea, where shorter-ranged attack aircraft proved sufficient [Vice Adm. John T. Hayward, "The Atomic Bomb Goes to Sea," *The Hook*, Summer 1981; and Gordon Swanborough and Peter M. Bowers, *United States Navy Aircraft since 1911*, 1990, p. 417].)

Thus by the end of September 1946, just a little over a year after the surrender of Japan, *all the personal, conceptual, organizational, logistic, and operational building*

blocks had been put in place for Secretary Forrestal's policy statement confirming a continuing U.S. naval presence in the eastern Mediterranean, the event Fisher describes in closing his article. The Navy had been in the vanguard of U.S. policy toward Europe and the Soviet Union, due to the flexibility of strategic thought bred into a generation of U.S. naval officers through study and application of the principles of peacetime global forward naval presence and wartime forward carrier striking fleet operations.

This tale has parallels in the situation in which the U.S. naval officers of the 1990s find themselves. Faced with the challenges of the post–Cold War world, the Navy has put together a succession of concepts—"The Way Ahead," . . . "From the Sea," and "Forward . . . From the Sea." (See Edward A. Smith, Jr., "What '. . . From the Sea' Didn't Say," *Naval War College Review*, Winter 1995; and Bradd C. Hayes, "Keeping the Naval Service Relevant," U.S. Naval Institute *Proceedings*, October 1993.) These have been rooted not only in traditional naval thought (forward presence again) but also in the experience of preparing for prosecution of the Cold War Maritime Strategy and of executing the naval portions of Operation Desert Storm.

But there is a difference. In 1945–1946, the United States' "peer competitor," the Soviet Union, and the major theaters of contention—Europe, the Middle East, and East Asia—became apparent quite quickly. Today, the world's strategic realignment is taking place more slowly and with less clarity. Nevertheless, the Navy should continue to study its traditions, its principles, and its recent deployment and combat experience. As in 1945–1946, therein will lie much of the answer to the next set of intellectual challenges to be faced. While this approach will not provide specific solutions to the problems of tomorrow, it will certainly provide the firm foundation for seeking those solutions.

Peter M. Swartz
Capt., U.S. Navy, Ret.
Center for Naval Analyses
Alexandria, Va.

"Doctrine on the Wrong Foot"

Sir:

It is well that the *Naval War College Review* has encouraged discourse on doctrine. When Major General Holley takes issue with doctrine's prescriptive nature (see Winter 1996, p. 117f.), he addresses the aspect about which the most debate has been registered. I do not say that doctrine must be prescriptive. I say two things. Doctrine has power to the extent that it is prescriptive. And doctrine is self-defining, hence the issuing authority must express itself so as to achieve

the right balance between prescription and flexibility. Of course General Holley is quite correct to perceive that I think contemporary U.S. naval doctrine needs to be stiffened, especially at Echelon 3, governing fleet tactics in littoral warfare.

That one must prescribe (teach) or be hollow seems self-evident. Naval doctrine prescribes the principles of war as sound doctrine. Prescribing them means to choose from among them, because some are mutually in conflict. One emphasizes the applicable ones for the circumstances. How if one ignores some of them? If he does so with marked success he will be a hero. But personally I think the principles say too little, not too much, and so have little utility or power. They are too abstract, general, and timeless for me. Our teaching should be about the here and now.

The Air Force says that an air campaign will be conducted using the Air Tasking Order. It might not say the ATO will always be used to conduct one, but Air Force doctrine is prescriptive about the ATO and is much more pointed than guidance. That is good. The Army and Marine Corps sometimes complain that the ATO structure is too rigid and unresponsive to their needs. If the ATO was expressed as something the Air Force might or might not act on, then the Army and Marine Corps would have nothing to challenge, Air Force planning would drift on a sea of indecision, and there would be no unifying power to implement the doctrine of air supremacy.

My article, "The Power in Doctrine" (*Naval War College Review*, Summer 1995), was an attempt to express the need to write doctrine with the right amount of latitude for creative thought and action built in, but not too much. Several churches will say there is One God. If they go no further, ecumenicism can reign, but His majesty and power over the lives of the faithful are missing. As soon as we say God expressed Himself through Jesus, Mohammet, or Buddha, then Christians, Muslims, and Buddhists have concrete tenets to follow, but universal cohesiveness is lost. If we say instead that God expressed Himself through Jesus, Mohammet, *and* Buddha, we have a compromise that will serve mankind with the moral teaching they share in common. Each of the three statements, if it is doctrine, says what I may believe and how I may behave. What's more, it tells *you* what to expect about my behavior, and that's very valuable. In the choice we see the essence of doctrinal value. But if I tell you that religious teachings are mere guidance, which I will take or leave depending on whether it's in my own current interest, I have no anchor and you have no basis for understanding my behavior or relying on it. Therefore when Holley writes that if we fail to establish a common understanding we will be doing a great disservice to national defense, I wholeheartedly agree.

General Holley says that if Captain Hughes will back off from his call for mandatory doctrine while retaining most of the power he seeks by encouraging greater emphasis on uniform techniques and procedures, we may yet

achieve effective joint operations. I'll be glad to back off that far, for I don't want the services to be dogmatic. With that understanding, now let's get down to cases. I shall test the water by proposing that the Air Force take the first step by backing off on the doctrine of the ATO. Or does the Air Force think the ATO's unifying, centralized power is too strong to surrender to the whims of the other services?

Wayne P. Hughes, Jr.
Captain, U.S. Navy, Ret.
Naval Postgraduate School

Sir:

I have taken special note of the excellent article prepared by Captain Wayne Hughes, USN, Ret., which appeared in the Summer issue of the *Review*. Wayne is a charter member of the Naval Doctrine Command Academic Advisory Group and has worked with our staff over the past three years in reviewing draft doctrinal publications.

Centralized, multiservice naval doctrine is new to the Navy, even if doctrine itself is *not* new. Wayne obviously disagrees with the identification of multiservice naval doctrine with the operational level of warfare and wants to see more emphasis on tactical-level doctrine. Service-specific, tactical-level doctrine is important, but the initial emphasis of the Naval Doctrine Command has been the development of multiservice operational (not programmatic) doctrine at the operational level of combat. There is much to do here as the military services come to grips with jointness and the need for multinational operational-level doctrine as well.

Clearly Wayne has a point, that doctrine must do more than identify what we would like to do—that is policy. The distinction between policy and doctrine is that the latter governs behavior. Where I disagree with Wayne is over the issue of prescriptive doctrine. Our studies of history show us that navies have always fared better when the on-scene commander has the authority to deviate from doctrine. Doctrine represents the distillation of the best knowledge of what one ought to do, in a perfect world; but we must always retain the right of our commanders to deviate when it is in their best interests. I think that the naval services can come to grips with doctrine that is both guidance and flexible.

Our current efforts to develop doctrine are evolutionary in nature. We have spent the past three years relearning the theory of doctrine and gaining an understanding of how doctrine is approached by other services, our joint

Doctrinal Issues			
	Action or belief	**Obligatory nature**	**Durability of doctrine**
Tactical-level service doctrine	doctrine determines action	obligatory except in exceptional circumstances	valid until in need of change
Combined arms and lower-level joint doctrine	doctrine determines action	provisional and subject to interpretation	durable for limited time only
Operational-level doctrine for campaigns	naval: beliefs joint: action	mandatory mandatory	somewhat somewhat
Strategic-level doctrine	doctrine is only belief	not mandatory	doctrine aspires to be durable

commanders, and multinational partners. Our focus of effort is moving from the fundamental development of Naval Doctrine Publications, the restructuring of Naval Warfare Publications, and work with the naval educational establishment to more direct interaction with training commands and the fleet.

The Naval Doctrine Command is committed to the codification of operational-level doctrine in the fleet. The products of NDC will be more descriptive than prescriptive, or, said another way, authoritative vice directive in nature. Doctrine for the naval services should not become dogma. With the assistance of the Naval War College, we have uncovered a virtual trove of interwar, World War II–era, and postwar written Navy doctrine that demonstrates that the U.S. Navy once accepted and routinely used centralized written doctrine. The fact that we modified and improved upon our written doctrine during the war itself refutes the oft-told tale that it is only the German Army that has historically been able to perform this task. We too have a history of learning during combat and capturing those lessons in our doctrine.

Wayne raised some good issues in his article, and I encourage all naval officers to read it. I found his argument for four levels of doctrine most provocative. I would like to offer the graphic above as perhaps a way to state Wayne Hughes's major points in a concise format.

Using this matrix, we can clearly see that there is room for a great deal of interpretation as to whether doctrine should govern actions, the role that service and multiservice doctrine plays, and how durable are the different types of doctrine. From our perspective, however, we would take a slightly different view of some of these issues. The following graphic illustrates our own position at Naval Doctrine Command (changes are in italics).

Doctrinal Issues			
	Action or belief	**Obligatory nature**	**Durability of doctrine**
Tactical-level service doctrine	doctrine determines action	*guidance*	valid until in need of change
Combined arms and lower-level joint doctrine	doctrine determines action	provisional and subject to interpretation	durable for limited time only
Operational-level doctrine for campaigns	naval: beliefs joint: action	*guidance* *obligatory except in exceptional circumstances*	somewhat somewhat
Strategic-level doctrine	doctrine is only belief	not mandatory	doctrine aspires to be durable

I "roger" for all of Wayne's specific recommendations to the Naval Doctrine Command, and I will personally review and consider each. Thanks for publishing his article, and I hope there will be more like it to follow.

Mike Bowman
Rear Admiral, U.S. Navy
Commander,
Naval Doctrine Command

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To Our Subscribers

As the U.S. Postal Service requires of holders, like this journal, of Second-Class Postage privileges, we "scrub" our circulation (less commands listed in the Standard Navy and Coast Guard distribution lists) biennially, half of it each year. In 1996 it is the turn of organizational subscribers (i.e., as opposed to individual persons). Institutions, firms, libraries, etc., will soon be receiving a mailer addressed to their "Librarian or Periodicals Manager," who should execute the pre-addressed tear-off postcard, attach postage, and return it to us. We must receive these cards by 30 September 1996: subscriptions of organizational (again, not SNDL or CGDL commands) that have not returned renewal cards by then will end with the Autumn 1996 issue.

Subscriptions for individuals will next be "validated" in 1997, by means of a tear-out card in the Spring issue.

SET AND DRIFT

– I –

Peer Competitors, the RMA, and New Concepts
Some Questions

Colonel Richard Szafranski, U.S. Air Force

MY INTENT IS TO CHALLENGE contemporary notions about such things, now unclear or dimly perceived, as peer competitors, the revolution in military affairs (RMA), and new concepts of operations and organization. This constellation of futuristic ideas, long favored by the Secretary of Defense's Office of Net Assessment, is meant to be a guide for thinking and planning in all the armed forces. Cynics suggest that the original purpose of discussions about RMA was to give the United States an elegant way to do the unavoidable: i.e., to perform "intelligent triage" on its existing force structure. But the true value of challenging these notions is not to discredit them—they are very important ideas—but to try to give spectators of the RMA and its participants greater discernment of the strengths and limitations of current thinking.

Colonel Szafranski, former commander of a bomb wing, is currently the Chair of National Military Strategy at the Air War College.

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The Key Ideas

Technology has changed, or "revolutionized," warfare before. Commentary on this particular RMA, however, is infused with awareness that some revolutions in this age of information technology and the global marketplace may be unconfinable.[1] If an adversary adopts revolutionary technology or embraces more effective concepts of operations enabled by new technology before or better than the United States does, will the U.S find itself at a disadvantage? If so, and if the adversary were a "peer," the effects of being disadvantaged could be disastrous in a conflict involving military force.[2] The Office of Net Assessment is attempting to convince U.S. armed forces to consider the effects of such a revolution; to use the words of its director, Andrew Marshall, the United States must "get this right."[3] Indeed, we must get the future right; but there are problems with some of the notions entangled in the RMA.

A technologically advanced peer would pose serious difficulties for the United States, precisely because it *could* pose them. Dr. Henry Kissinger's latest book, *Diplomacy* (New York: Simon and Schuster, 1994, p. 813), issues this post–Cold War warning: "Geopolitically, America is an island off the shores of the large landmass of Eurasia, whose resources and population far exceed those of the United States. The domination by a single power of either of Eurasia's two principal spheres—Europe or Asia—remains a good definition of strategic danger for America, Cold War or no Cold War. For such a grouping would have the capacity to outstrip America economically and, in the end, militarily. That danger would have to be resisted even were the dominant power apparently benevolent, for if the intentions ever changed, America would find itself with a grossly diminished capacity for effective resistance and a growing inability to shape events." Thus, in Kissinger's view, a "peer" that dominates Europe or Asia must be resisted. Although the conception of a peer competitor is difficult to distinguish from the idea of a revolution in military affairs, for purposes of analysis it can be considered separately.

A cynic would assert that when a big and awkward organization like the Department of Defense cannot find a threat or an enemy sufficiently frightening to the electorate to justify a large, steady appropriation, creativity can provide what the geopolitical environment no longer does—a "peer" competitor. Whether that assertion represents a discovery or not, there are at least three problems with creating peer competitors.

First, the current definition of "peer" is tautological: that is, the peer is a mental construct, a mirror-image of the United States after the RMA is consummated. Thus, the more technologically capable the United States becomes, the more capable the imaginary peer; a more capable peer, in turn, begets the need for a yet more capable United States. In other words, the peer becomes

the imaginary replacement for the Soviet Union, with two important differences. First, the imaginary European or Asian peer is not a named state or coalition of states, and so it has no specific territory, competing internal-resource requirements or political objectives, or other constraints on its behavior. The peer is an abstraction, an ideal; whatever else the unspecified, mirror-image peer may be, it is unreal. To make it real, to call it "a resurgent Russia" or "an aggressive China," is impolitic. There is no lag time in the imaginary peer's technology acquisition and deployment cycle—the challenger arises unexpectedly. An actual or potential real peer has sharper definition; only an imaginary one presents these difficulties.

The second problem with the notion of a future peer competitor is the lack of a reasonable benchmark for "peer-hood." By what standards is it determined? If, as we have asserted, the idealized peer will be a mirror-image of the United States, it must be viewed as a shadow nation or coalition, evolving as the United States evolves, copying its technology, tactics, and blunders. If the U.S. believes that massively large land armies and scores of armored divisions using "dominating maneuver" are the essence of military power, the peer also believes that and fields just such a force.[4] If the United States believes that weapons in space constitute a revolution in military power, the peer has space weapons also. The obvious danger—that of creating an environment that forces a peer forward in self-defense—is ignored.

Even setting aside the possibility of provoking what might have been avoided, another pitfall with this way of thinking is that the United States may look only for dangers in symmetrical areas and in familiar combinations. It may look more at states than at non-state groups and at traditional sources of military power rather than at some seemingly innocuous area that can nevertheless be employed with malice. For example, such realms as genetic engineering may elude our attention, and such unfamiliar combinations of disciplines as biotechnology, altering human behavior, or even recoding DNA cannot be understood within the logic currently used to search for and assess peer competitors.

Goliath was scanning the horizon for Goliath and erred when he did not see a peer in young David. Might it be that by 2015 or 2020 there will be a different "gold standard" for strength or military power? Might it be that *any* nation or group having the ability to prevent the United States from meeting its objectives, or to meet its own objectives in spite of U.S. opposition, will become a "peer"? Could there be a single new technology or a handful of revolutionary, high-leverage approaches that the U.S. armed forces (increasingly separated as they are from nonmilitary society) will miss because they do not kill, crush, or otherwise render things dysfunctional? This would be a problem. As revolutionary as RMA advocates believe it to be, it may not be revolutionary enough to consider that the very measures of power may be shifting. Higher speed, greater

stealth, finer precision, and less (or more) lethality may not be the only changes emerging; the possibility of revolutionary changes arising in unexpected quarters with dramatic effects must not be precluded. RMA thinkers in the United States must also be able to imagine these contingencies.

The U.S. armed forces are structured for specific purposes and exist within the framework of the American democracy. During the Cold War, they had few doubts as to what those purposes were. However, what ends the armed forces serve today and will tomorrow is being debated. While the nation may tinker with the forces or their internal structures—moving, say, from the current federated force structure to a more integrated one—it is most unlikely that the United States will alter the structure of American democracy. Thus, the third problem with the notion of a peer is that the United States is difficult to compare with any other system. In the United States, Congress raises and supports the armed forces and declares war, but the president is the commander in chief; it is a wonderful system, but it may not thoughtfully be described as a rapidly responding one. It was not the intention of the nation's founders that it be so, and the nation has remained faithful to the founders' intent. The decision to resist Iraq with force of arms was not made quickly. Deliberations centering on how the U.S. should employ its armed forces against nations move slowly and are not isolated from partisan politics.

If in the future another nation, coalition, or group is able to decide and act more quickly than the United States, the U.S. could be denied the advantages that even an "almost-peer" possesses in warfare. The United States can and undoubtedly will, RMA or no RMA, fill its quiver with technologically superior arrows, but if it does not have the will to employ those arrows quickly and decisively it may find itself less effective in conflict than its opponents. When authentic peers are about to fight, the faster to act may paralyze the slower. Overall system speed is important.

For all these reasons, therefore, the notion of what really constitutes a peer bears closer scrutiny than it has received to date.

Is There a "Revolution" or Not?

The Office of Net Assessment defines the revolution in military affairs as "a major change in the nature of warfare brought about by the innovative application of new technologies which, combined with dramatic changes in military doctrine and operational and organizational concepts, fundamentally alter the character and conduct of military operations."[5] But is there a revolution? The Defense Intelligence Agency asserts, in its unpublished study "The Global Tides of 2014," that there will be no changes to the nature or character of military operations brought about by revolutionary technology.[6] The Chief of Staff of

the Army (apparently alone among the service chiefs) seems to think that there will be a revolution, yet others in the Army assert that while the revolution may change the conduct of warfare, it will not alter the nature or character of warfare.[7]

While there certainly may be a "military technical revolution" underway, it is doubtful that there is or will be a revolution in the "military affairs" of the United States. What are "affairs," anyway? The dictionary definition hints at the vagueness and lack of specificity of things described as "affairs." In the context of the current RMA discussion, the word seems to have been selected as a catch-all term, because nothing meaning precisely "more than just military technology" came easily to hand. "Affairs" is too broad to communicate much meaning; "military affairs," whatever they are, dare not intrude in American politics, a key element in how the U.S. fights and how it prepares to.[8]

If "affairs" is a meaningless word, "revolution" may be an overly dramatic one. For centuries, slow, evolutionary, and accretionary changes have characterized warfare. What in hindsight we call revolutionary changes—save for nuclear weapons—have been only small innovations fortuitously combined and employed. For all the time and resources humankind has spent looking for better ways to crush, pierce, burn, or infect humankind more precisely, more quickly, and from farther away, it may be that we have discovered nothing truly revolutionary—except, again, nuclear weapons. If used in warfare, however, nuclear weapons cure fewer ills than they cause. Even information operations and other nonlethal devices may be little more than a return to Sun Tzu's vision that "to subdue an enemy without fighting is the acme of skill."[9] Will these cause a revolution? The Defense Intelligence Agency's assessment, supported by the United States Air Force and the United States Navy at least, seems to suggest that there will not be a revolution.

What we are left with, then, is that there may or may not be a revolution on the horizon and that if there is it will produce technology which enables changes in military operations—not military "affairs." Without a better understanding of revolutions and the means necessary to engineer them, the whole RMA may be just so much arm-waving. But consider the possibility that it is *not* just arm-waving; indeed the important element in the RMA is the simple notion that technology, properly assimilated and employed, can increase military power. The idea of a peer only serves to remind us that people—states especially—have accumulated a long history of fighting peers, thinking about fighting them, and thinking about preparing for it—all of which tells us how much "stuff" we need to do that. Unfortunately, it may not tell us *what* stuff is needed or how to employ it most effectively.

New Concepts of Operations and Organization

Are the current concepts of operations and organization, general and specific, adequate to capitalize on the technological discoveries that will make

revolutionary improvements in warfare? Probably not. If they were, they would in themselves constitute a genuine revolution: the shackles would necessarily have been broken that are imposed by the current and unpredictable defense appropriation process, the acquisition system, by the existence of separate and competing services and of commanders in chief organized for operations in geographical areas of responsibility. If any one of these factors is left unaltered, the U.S. military remains fettered to its current ways of doing business.

Is it likely these shackles will be broken? No, it is not. An assertion is not a proof, and to provide the proofs that military "affairs" in the U.S. resist change is beyond the scope of this essay. But we may observe that combat power is the product of a system, that the elements constituting a system are interactive, and that the system tends to sustain equilibrium. RMA advocates, for instance, who point to the German concept of *blitzkrieg* must admit that the idea of "lightning war" emerged from a different system than that of the United States. The U.S. may dabble with new organizational forms at the operational level, but it is unlikely to change its system sufficiently to revolutionize its combat power.

Nonetheless, thinking about the possibility of an RMA is useful. Contemplating what the U.S. would require to meet its objectives if opposed by a peer competitor is essential. Striving to ferret out new technologies that could revolutionize warfare is extremely valuable. Searching for more effective organizational forms and employment concepts is obligatory. However, believing that there will actually be an RMA in the United States is probably foolhardy. The U.S. military is as averse to change as it is to risk. A revolution requires behaviors and attitudes that the U.S. system is not capable of summoning forth. That system cherishes evolutionary change, and so evolutionary change is what we should expect to see—except, of course, in our peer competitor.

Notes

1. V.K. Nair, *War in the Gulf: Lessons for the Third World* (New Delhi: Lancer International, 1991), p. 110. Nair writes, for instance, that "active measures to degrade attacking electronic systems should be cost effective and simple. For example, the most sophisticated system, such as that of the United States, could be totally disrupted by the projection of a suitable virus that would automatically find their [*sic*] way back into the computers on which the systems are dependent. Cheap, simple and effective avenues must be exploited on a priority." The suggestion that unconfinable information technology be used as a form of weapon by developing nations suggests the possibility that other nations will engage in, or will strive to engage in, advanced forms of command and control warfare.

2. Mary FitzGerald, *The Impact of the Military Technical Revolution on Russian Military Affairs*, vol. II (Washington, D.C.: The Hudson Institute, 1993). FitzGerald considers the effects of a United States RMA on an adversary.

3. Andrew Marshall's opening remarks to the players and spectators at Revolution in Military Affairs Space War Game Number One, "The Langrangian Heights," Washington, D.C., 18 July 1994.

4. Jeffrey McKitterick, et al., "The Revolution in Military Affairs," Science Applications International Corporation, proprietary draft booklet, July 1994, pp. 14–6

5. Ibid., p. 1.

6. U.S. Department of Defense, Defense Intelligence Agency (DIA), "The Global Tides of 2014," March 1994, p. 1. In the only "footnote" lies the Department of the Army's formal dissent from the assessment that

there will not be, or could not be, a revolution in military affairs. The Navy and Air Force at least tacitly agreed with the DIA position that there would be no revolution.

7. Earl H. Tilford, Jr., preface to Gordon R. Sullivan and James M. Dubik, *War in the Information Age* (Carlisle Barracks, Penna.: Strategic Studies Institute, 1994), p. iv. Tilford asserts that "Clausewitz is still relevant to the study of war because while the conduct of war will change, the nature of war will be the same."

8. Richard H. Kohn, "Out of Control: The Crisis in Civil-Military Relations," *The National Interest*, Spring 1994, pp. 3–17; and Carl von Clausewitz, *On War*, Book One, ed. and trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton Univ. Press, 1976), p. 79.

9. USAF Air Intelligence Agency, *Strategic Plan* (Washington, D.C.: October 1993). The Air Force Information Warfare Center was created on 1 October 1993; according to the Plan, its "primary role is to channel all electronic battlefield information toward *gaining information dominance* over any adversary" (emphasis added). See also Joint Chiefs of Staff (JCS) Publication 3-13, *Joint Command and Control Warfare (C2W) Operations*, first draft 15 January 1994, second draft 1 September 1994. The drafts of this doctrinal publication were preceded by others: Chairman, Joint Chiefs of Staff (JCS) Memorandum of Policy (MOP) 30, *Command and Control Warfare*, 8 March 1993; JCS Publication 3-53, *Doctrine for Joint Psychological Operations*, 30 July 1993; and JCS Publication 3-0, *Doctrine for Joint Operations*, 9 September 1993. See also "Information Dominance Edges toward New Conflict Frontier," *Signal*, August 1994, pp. 37–40; John Arquilla and David Ronfeldt, "Cyberwar Is Coming!", *Comparative Strategy*, April-June 1993, pp. 141–65; George Stein, "Information Warfare," *Airpower Journal*, Spring 1995; and Scott Shane, *Dismantling Utopia: How Information Ended the Soviet Union* (Chicago: Ivan R. Dee, 1994). For nonlethal weapons, see Mark Tapscott and Kay Atwal, "New Weapons That Win without Killing on DoD's Horizon," *Defense Electronics*, February 1993, pp. 41–6; David A. Fulghum, "ALCMs Given Nonlethal Role," *Aviation Week & Space Technology* [hereafter *AWST*], 22 February 1993, pp. 20–2; "Nonlethal Weapons Give Peacekeepers Flexibility," *AWST*, 7 December 1992, pp. 50–1; "Army Prepares for Non-Lethal Combat,"*AWST*, 24 May 1993, pp. 62–3; and Art Pine, "Not So Deadly Weapons," *Los Angeles Times*, 20 December 1993, p. 4. There are many others.

Ψ

Eleventh Siena College Conference on World War II

The eleventh annual Siena College multidisciplinary conference on World War II will be held at the college 30–31 May 1996. The theme will be "A Dual Perspective" on the years 1936 and 1946. Papers are especially solicited on (for 1946) displaced persons, war crimes trials, literary and cinematic studies of the war, veterans affairs, the G.I. Bill, economic reconversion; and for 1936, on the rise of fascism, Japan and China, Italy and Ethiopia, the League of Nations, arms and armament, military doctrine, the Spanish Civil War, pacifism, and the impact of World War I. Replies and inquiries to Prof. Thomas O. Kelly II, Dept. of History, Siena College, 515 Loudon Rd., Loudonville, N.Y., 12211-1462, telephone (518) 783-2595, fax (518) 783-4293, e-mail kelly@siena.edu.

— II —

A Voyage through Modern Naval Fiction

Rear Admiral James A. Winnefeld, U.S. Navy, Retired

WHAT GREATER FUN CAN THERE BE than to pick up a new work of naval fiction, or an older one that has just been discovered or rediscovered? One does not have to be a sailor to enjoy naval fiction; the great popularity of Patrick O'Brian's series on the adventures of Jack Aubrey and Steven Maturin during the Napoleonic wars attests to its broad appeal. It is the richness of the menu that first attracts the reader, and soon thereafter he is choosing sides as to which novel captures the prize for telling the story best.

What is it about the naval environment (be it the early nineteenth century of O'Brian or the mid-twentieth-century work of Nicholas Monsarrat or Herman Wouk) that captures the reader's imagination? One answer may lie in the tension between the sailor and his environment (*HMS Ulysses*, *The Cruel Sea*), between a sailor and his opponent (*The Good Shepherd*) or his shipmates (*Delilah*, *Sand Pebbles*), or indeed between a sailor and himself (*The Caine Mutiny*). There is also the attraction of the varied backdrops; O'Brian's and C.S. Forester's heroes travel the world, while the world of Richard McKenna's Jack Holman was the China of the 1920s. Another part of the lure of these novels is the prospect of adventure ("*Sail Ho!*") just over the horizon or around the next headland.

If we limit ourselves to, say, the years from the 1930s to the mid to late twentieth century, we omit such classic writers as James Fenimore Cooper, Herman Melville, and Joseph Conrad. But they have already received their due. Let us also put aside for the moment the superb series of Patrick O'Brian and that of C.S. Forester, as well as the warhorses of popular literature that contain

Admiral Winnefeld is presently a resident consultant with the RAND Corporation. He is a winner of the Naval Institute Arleigh Burke Award for 1989 and 1995. He coauthored *Joint Air Operations: Pursuit of Unity in Command and Control, 1942–1991* (Naval Institute Press, 1993) and *A League of Airmen: U.S. Air Power in the Gulf War* (RAND, 1994). He lives in Annapolis, Maryland, and is a collector of first editions of naval fiction.

a substantial naval component, such as Wouk's *Winds of War* and *War and Remembrance*, and look at the stand-alone giants of modern naval fiction. Which of them would stand in the top ten? Most would agree that the following should be in every library of naval literature.

My first choice is *The Caine Mutiny*, by Herman Wouk. This classic work captures, perhaps best of all, the interactions of individuals in a small and elderly ship facing the enemy and itself in a battle for survival. *Caine*'s storm, the ensuing court-martial, and its aftermath culminate in Barney Greenwald's cleverly turning the tables on the lament of the "reserves" against the "regulars." This work stands as a tour de force of the storytelling art. Reread *The Caine Mutiny* and be enthralled by its story and the dramatic art of its author.

A close second is *The Cruel Sea* by Nicholas Monsarrat, who does a better job weaving a love story into his saga of HMS *Compass Rose* than Wouk did in *Caine*. It is another postwar novel written by a reserve officer who grew up under the strain of combat, the sea, and shipboard relationships. This work's strength is showing how the protagonist, Lockhart, comes of age in the crucible of combat. If you enjoy *The Cruel Sea*, you will also enjoy *A Sailor's War*, by Sam Lombard-Hudson, who served as Monsarrat's model for the skipper of *Compass Rose*. It is fascinating to read about junior officer Monsarrat in *A Sailor's War* as seen through the eyes of his skipper.

Interestingly enough, neither Wouk nor Monsarrat are "naval writers"; both have written fiction in a variety of milieus. However, it is telling that it is their naval works for which they will be most remembered.

My third choice is Alistair McLean's *HMS Ulysses*. McLean's first major novel is set against the challenge of getting a convoy through to Russia during World War II. His accounts of storms at sea are among the most gripping in modern naval fiction. The action centers upon the actions of the skipper and wardroom officers of a small cruiser, with a flag aboard. McLean does not take the easy way out, that of having the embarked admiral and skipper in conflict. Both are sympathetic, and each acts professionally in his own sphere, but in the end the opponents to be outwitted are the sea and the enemy. The final action scene, a nautical "charge of the Light Brigade," will seem far-fetched to many but will bring a smile of admiration and a nod of the head from old sailors.

Some would rank Tom Clancy's *The Hunt for Red October* higher than fourth, but in my opinion Clancy remains an incomplete novelist, because of the improbability of his plots and the lack of depth in his characters. However, Clancy has founded an entirely new class of fiction, of crisply moving scenes tied together by convincing technical detail that is among the best provided by modern naval authors. *Red October* remains Clancy's best novel, though I have a special liking for his *Red Storm Rising*.

Marcus Goodrich's *Delilah* is the sleeper of this list. His evocation of interactions among the crew of a four-pipe destroyer in the Philippines just before World War I remains one of the best stories of the naval service. Goodrich does not dwell on technical detail, though the scene rings true, but rather examines the complex relationships of officers and enlisted men—the antagonism, loyalty, and even affection (in the best sense of the word). Goodrich's style is similar to Conrad's in its sometimes surreal descriptions, and, although the story is not tightly woven, the series of events that result in the bizarre climax will grip the reader. *Delilah* was Goodrich's only published novel.

McKenna's *Sand Pebbles* also focuses on the lower decks, the conflicts encountered by Machinist's Mate First Class Jake Holman in the USS *San Pablo*. McKenna, a former chief petty officer, describes the tensions and the contrasts among the men on the Yangtze River patrol during the upheaval of the 1920s.

"It is striking that the best novels have been written by reserve officers. . . . The regulars do not make much of an appearance. . . . Good storytellers in the naval service run the risk of becoming 'happy hour' bores or eccentric 'also-rans' come fitness report time."

Published in 1962, just before the United States entered the Vietnam War, this novel captures the American imagination, making vivid the problems of involvement in revolutionary conflicts overseas. McKenna captures the feel below decks and also the anomalous position of American sailors in China. If the story seems a bit contrived, the reader will soon forgive the author, who does a superb job of setting the scene and narrating the action. Unfortunately, due to his untimely death this is the only significant work McKenna left us.

My pick for number seven is C.S. Forester's *Good Shepherd*. This is another convoy story—about not Hornblower in the age of fighting sail but about an American destroyer captain (and convoy escort commander) attempting to get his convoy through. The interplay between the skipper, his opponents, and his own charges is in many respects Forester at his best. Some would say it was his best novel after *African Queen*.

Run Silent, Run Deep, by Ned Beach, and *The Boat*, by Lothar-Gunthar Buchheim, are a tie for number eight. These submarine novels are gripping, each in its own way. Beach tells a good story that has the enemy as the principal source of tension. No reader will soon forget "Bungo Pete" as an opponent worthy of the hero's best. *The Boat* is a story of survival and quiet courage. It is a classic from the perspective of a World War II Axis opponent. Both books are superb counterpoints to the convoy novels of McLean, Monsarrat, and Forester.

Jan de Hartog's *The Captain* tells a story from the unusual point of view of the skipper of a salvage tug assigned to convoy work. One experiences the North Atlantic and the Murmansk run at their wildest (reminiscent of *HMS Ulysses*) and, again, the moral choices inherent in command. Duty and survival are put into sharp contrast as the protagonist battles the elements and the enemy. One also gets a feel for the ocean towing business, along the way.

Rounding out the top ten is Kenneth Dodson's superb *Away All Boats*. This is the only book of the ten devoted to the amphibious ("gator") Navy. Dodson offers a rich blend of heroes and lesser figures, and he captures the reader with his scenes of the air attacks during the Okinawa landings, showing the crews' sense of powerlessness in being a big, fat target. Dodson also portrays well the tensions between seniors from the regular Navy and their reserve juniors, showing sympathy for both sides and using only a minimum of caricature.

So, what is not included on my list? There is nothing about the air Navy—probably because books on the subject are few in number and are stories more about air than the Navy. Frederic Wakeman's *Shore Leave* and James A. Michener's *The Bridges of Toko-Ri* are interesting but of narrow appeal. Stephen Coonts's *Flight of the Intruder* is (along with Derek Robinson's *Piece of Cake*), probably one of the best pieces of air fiction written since World War II, but its naval setting is incidental to the story.

Anyone with an interest in the U.S. Naval Academy and the naval "mystique" is advised not to overlook Paul Horgan's *Memories of the Future*. Although principally telling a story of naval families and their loves and tragedies across decades, Horgan has done a fine job of dissecting the basis of loyalty to service and shipmates, using as his vehicle forty-eight hours in the Academy superintendent's quarters in the late 1940s. Other novels of importance include James Bassett's *In Harm's Way*, Thomas Heggen's *Mr. Roberts*, and Mark Rascovich's *The Bedford Incident*. There are many more, such as Vice Admiral Bill Mack's fine series on World War II destroyers; the list is too large to discuss here.

But let us return to naval series writers, of whom the current dean is Patrick O'Brian. His seventeen-volume series, which began with *Master and Commander*, traces the journeys of Captain Jack Aubrey, Royal Navy, and Dr. Stephen Maturin. There is no richer depiction of naval life during the age of sail to be found than in these critically acclaimed works. One can only wish O'Brian a long and productive life, as we eagerly await the next title in 1996.

Before O'Brian came to public notice a decade or so ago, it was C.S. Forester and his hero Horatio Hornblower who were the darlings of naval fiction. Today one can still enjoy reading the Hornblower series, though after O'Brian one tends to become restless with Forester's two-dimensional characters—with the exception of Hornblower himself, of course. It is not that Forester at his best is not good, but that O'Brian is even better.

Not in the same league as Forester is Dudley Pope's Ramage series. Pope, a popular historian of nautical subjects, particularly the naval wars of the eighteenth and nineteenth centuries, falls short in the fictional venue. His hero, Ramage, works through a series of tales that occasionally come close to being potboilers. Although not really forming a series, perhaps of greater interest are Douglas Reeman's stories of the Royal Navy from 1900 to World War II.* The prolific Reeman's technical and historical detail enhances the drama of naval combat in out-of-the-way places. His style will attract readers looking for a light yarn with lots of excitement. The last serialist of my list is C. Northcote Parkinson, whose hero is Richard Delancey. Parkinson has the naval historian's eye and ear for time and place, but his characters are wooden and his action often contrived.

It is striking that the best novels have been written by reserve officers or by former petty officers. Except for Ned Beach and Bill Mack, the regulars do not make much of an appearance in the top ten (or twenty) best novels of naval life. Perhaps this is to be expected. Serious fiction is a consuming profession, and there is little time in a regular's life to cultivate the novelist's skills. Moreover, the serving officer sees the challenges and tensions of naval life as problems to be solved and hurdles to be crossed rather than as dramas to be dissected and narrated. Good storytellers in the naval service run the risk of becoming "happy hour" bores or eccentric "also-rans" come fitness report time. After all, watches are to be spent smartly performing one's duties, not dreaming or deep in philosophical conversation with one's fellow crewmen, as was the case on the bridge of Marcus Goodrich's *Delilah*.

What other gaps are there in our survey of naval fictional literature? Except for *Red October* and its imitations (some by Clancy himself), and setting aside O'Brian's work as a special case, we are still waiting for the superb novel of the late twentieth-century U.S. Navy, that is, one both written and set in that period. The Vietnam and Gulf wars are not particularly attractive backdrops. The former's principal naval component was aviation and brown-water, while the latter was too short to offer the continuity and drama of more extended conflicts.

So, what is left to write about? Somewhere there is a story that centers on the "choices" that face a naval officer in command: between running a ship or squadron as a business (the bottom line) or as a family (people come first); going by the book or by instinct; shooting first (as did the *Vincennes*) or shooting second (the *Stark*); and the choices between ship, shipmates, and self. These have been the choices of a skipper throughout history, but major social changes are afoot, and today's Navy is different from the Navy of the past—women are going to sea. Surely there are great stories to be told of the trials and triumphs of women joining the first ranks of the naval profession, but we have yet to see first-rate

* Douglas Reeman has also published (writing as "Alexander Knox") a series of Richard Bolitho novels, about Napoleonic-era naval warfare.

naval fiction on women officers or enlisted personnel in *professional* action. There is also a technical revolution underway (take a look at the inner workings and hidden mechanisms of an Aegis cruiser), as well as a major redrawing of the map of the world.

In this rich brew there must be a new Wouk, Goodrich, Forester, or O'Brian to chronicle events and entertain us in so doing. But allow me a cautionary word: the great novel of the late-twentieth-century Navy will have to be about people—believable people and how they interact in the naval environment—not about hardware or a bizarre enemy. The greatest mid-twentieth-century novelists on naval matters learned this lesson well. We are in their debt.

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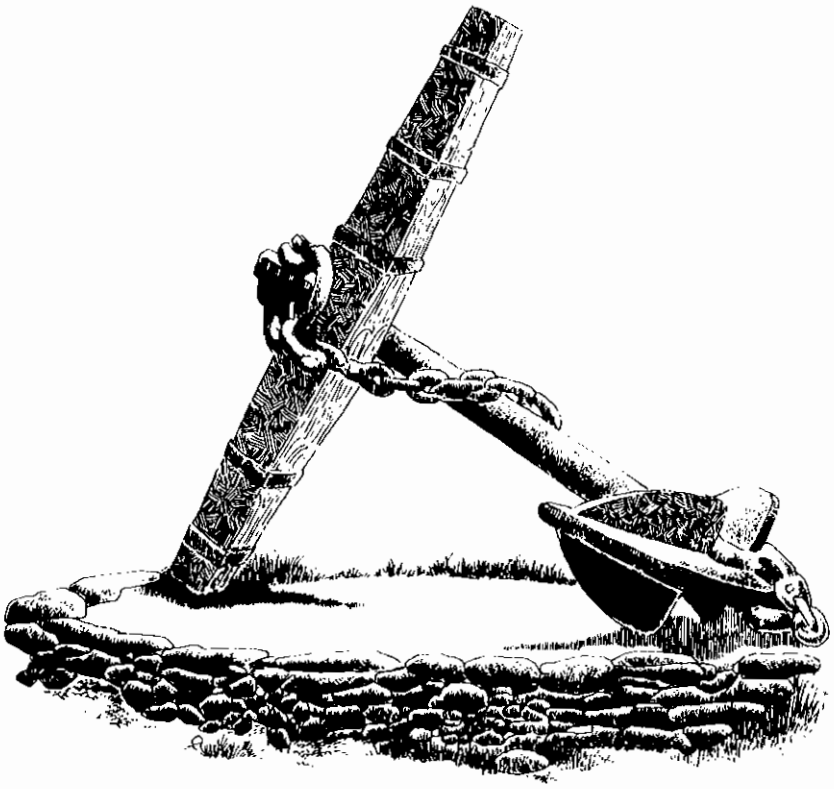

The anchor of the USS ***Constellation****, which in the late nineteenth century was berthed as a training ship at Coasters Harbor Island, near the Naval War College, is displayed today on the grounds of the College.*

BOOK REVIEWS

A book reviewer occupies a position of special responsibility and trust. He is to summarize, set in context, describe strengths, and point out weaknesses. As a surrogate for us all, he assumes a heavy obligation which it is his duty to discharge with reason and consistency.

Admiral H.G. Rickover

"A Smorgasbord of Defense Thinking"

Davis, Paul K., ed. *New Challenges for Defense Planning: Rethinking How Much Is Enough.* Santa Monica, Calif.: RAND, 1994. 769pp. $25

FOR THOSE WHO STILL ASSOCIATE THE RAND Corporation with its large role in developing U.S. nuclear strategy, *New Challenges for Defense Planning* provides the answers to some interesting questions posed at the end of the Cold War: What do the "wizards of armageddon" do, now that armageddon has been (we hope) averted? Do they continue "thinking about the unthinkable," or do they turn their efforts to new subjects? From this broad collection of essays, it appears that a little of both is true; some are a continuation of RAND's earlier work and some show movement toward new ideas. The analysts approach the post–Cold War era with a sense of excitement: "These emerging questions are a boon for those involved in defense planning," states the editor, "because starting afresh is interesting and challenging." These essays are the result of research sponsored by the Air Force, Army, Department of Defense, and the Joint Chiefs, which represent their concerns. There is little here for those interested in naval affairs but much to benefit naval readers interested in improving their knowledge of joint operations.

The first major section of the book deals with the principles of defense planning, looking at different models for the logical analysis of defense issues and at structures for rational planning. The most interesting of these essays, however, is "The Discipline Gap and Other Reasons for Humility and Realism in Defense Planning," by Kevin Lewis. He analyzes defense spending rates, approaching the effects of defense planning rather than its causes. He discovers a process stubbornly resistant to intervention, where intention and execution are often markedly different. He also raises concerns about rapid drawdowns, which can

cause great damage to military readiness—a sobering thought as politicians try to strip-mine quick deficit reductions from defense budgets.

The next group of essays is about strategic planning, examining the impact of the end of the Cold War on grand strategy, and also the start of an era where competition may shape the future more than does conflict. These essays look at protecting the "great transition" that ended the Cold War, the probability of facing nonstandard contingencies, and the need to consider military roles in operations other than war. Two essays discuss ballistic missile defenses—a technology that has matured into feasibility and an attractive capability in an uncertain world—warning that while attractive, these systems could bear a high cost and rekindle nuclear competition between Russia and the United States.

The following section examines operational or campaign-level planning, looking at current U.S. plans that deal with two major regional contingencies and the high probability of the U.S. facing contingencies that do not fit these plans. One essay looks at Poland's new position in a largely post-communist world and its options for new, independent defense strategies and forces. Another looks at the U.S. Air Force's options for adapting bomber forces from strategic nuclear roles to new conventional roles in regional contingencies. This group of essays makes it clear how fortunate the U.S. was during the Gulf war, facing an enemy content to dig in and give its opponents time to constitute offensive forces in the region.

The final section focuses on the economic concerns of the U.S. defense program, as well as the issue of supplies and logistics. The first two essays deal with aviation and force modernization from the viewpoint of the Navy's "competitors," and they draw some interesting conclusions. Another interesting essay searches for the best mix of Army, Army Reserve, and National Guard forces, in an attempt to bring rational analysis to an issue that is often dealt with on the political level. Other essays look at strategic mobility options and the opportunity to use emerging "leaner" commercial supply philosophies to improve defense logistic systems.

This book is a smorgasbord of defense thinking without any attempt to reconcile the differences between its disparate authors. It is often difficult reading and assumes a high level of prior knowledge from the reader, and the text is often punctuated with graphs, charts, and formulae. However, those who are searching for substance rather than style and are willing to persevere will find much here to reward them.

Alan L. Brown
Commander, U.S. Coast Guard Reserve

Wander, W. Thomas et al., eds. *The Diffusion of Advanced Weaponry: Technologies, Regional Implications and Responses.* Washington, D.C.: American Assoc. for the Advancement of Science, 1994. 391pp. (No price given)

This is an anthology of papers that were presented in 1992 and 1993 at three workshops on the proliferation of advanced weaponry, sponsored by the American Association for the Advancement of Science. The eighteen authors are experts from Russia, America, China, India, Pakistan, and Korea, with impressive academic and governmental credentials and representing a wide variety of perspectives on the problems of nonproliferation.

Eric Arnett provides a clinical and comprehensive overview of the interrelations between advanced weaponry, doctrine, culture, and policy. His paper serves as a dispassionate introduction.

Alden Mullins argues that presently only nuclear weapons are weapons of mass destruction. His discussion of the problems of deterrence among developing states is excellent, though he believes the Cold War was more stable than it actually was, terming the five declared nuclear-weapon states "essentially status quo powers." In fact, both the United States and the Soviet Union are (were) revolutionary states, and the destabilizing effect of our revolutionary aggressiveness was illustrated during the Cuban missile crisis. However stable the Cold War seems in retrospect, Mullins points out that states to which such weapons are now proliferating are less stable, since none have made the tremendous investments that the United States and Soviet Union have made in creating "extremely secure and redundant nuclear weapons capabilities that made preemption impractical."

James Roche gives a good overview of cruise and ballistic missile proliferation in the developing world. His discussion of tactical aircraft production in the developing world does not offer a context of the overwhelming power of the combat air fleets of the developed world, nor does he point out that there are only a few nations capable of building the next generation of tactical aircraft, making control in this area relatively achievable. By contrast, Arthur Baker presents a very fair-minded appraisal of naval technology, pointing out that the sheer cost of navies is widening, not narrowing, the performance gap between rich and poor states.

Paul Bracken provides excellent insight into the importance of "C4I" (Command, Control, Communications, Computers, and Intelligence) and the political and cultural reasons that C4I is often neglected in favor of more obviously impressive weapon systems.

In his second paper, Eric Arnett is the voice of reason as he concludes that "many of the risks [of preventive war and inadvertent escalation] are irreducible. . . . The most important step any state can take is to reduce or eliminate its nuclear arsenal or forswear assembling one in the first place."

Hasan Rizvi offers an excellent overview of Pakistani threat perception and the causes for nuclear proliferation, highlighting China, Pakistan, and India as a case study. As Dingli Shen asserts, "China developed its limited nuclear

weapons capabilities at an early stage to counter the U.S. bluff and to break the U.S. nuclear monopoly." And Sumit Gaguly states that "virtually all Indian analysts argue that India needs nuclear weapons to contend with the Chinese threat." Shireen Mazari outlines Pakistan's motivation for building a nuclear weapon capability in reaction to the Indian threat and declares that the Pakistani bomb is a stabilizing factor: "In summer 1990, at the height of the Kashmir insurgency, war between India and Pakistan was averted after Pakistan informed India of its nuclear capability." Di Hua's defense of Chinese nuclear and weapons export policies and his biting and acerbic attack on what he terms American unfairness are certainly partisan, but they lend us a valuable insight.

These papers in particular dramatize how difficult it can be to control nuclear weapons proliferation under the regime of the Nuclear Nonproliferation Treaty (which was reviewed last year), or, indeed, any other single regime. The motivations for obtaining nuclear arms are complex, including economic, political, and cultural factors, as well as intensely regional military ones. Limiting and reducing the spread of advanced weaponry would thus seem to require both global and regional regimes.

Each paper assembled here is clearly written and worth considering. Students of proliferation, regionalists, and defense analysts will find much here of interest and value.

TOM COOL
Commander, U.S. Navy

Graham, Norman A., ed. *Seeking Security and Development: The Impact of Military Spending and Arms Transfers.* Boulder, Colo.: Lynne Reinner, 1994. 259pp. $40

In his conclusion, editor Norman Graham observes that this interdisciplinary collection of articles may have been better at raising new directions of inquiry than answering the questions posed in the introduction: Does military spending retard economic development? Do the regimes that spend heavily on defense and arms transfers also promote economic development effectively? And ultimately, is there cause for optimism about either security or economic development in the Third World?

Although the general consensus of these articles is pessimistic on the future of many Third World countries from the perspective of both security and economic development, the editor and his contributors conclude that there are too many nation-specific variables and data inadequacies to make authoritative, global judgments on these questions.

One such inadequacy is the currency of statistics available on a variety of important issues. Much of the data on arms spending, aid expenditures, and gross domestic products are no more recent than the late 1980s. Of course since then there have been many important changes in the nations discussed in this book. For example, the Nigerian economy has collapsed, there has been economic and political upheaval in Brazil (while the rest of Latin America has been privatizing and democratizing), and the political crisis in and around the Republic of South Africa

has been resolved. The reader is left to wonder whether the authors would have reached the same conclusions had more recent data been available when these articles were written.

The first half of the book addresses definitions of security and reviews trends in international arms transfers, the evolution of the defense industrial base in Taiwan, the development of the Indian armed forces, and the history of Soviet arms transfers to the Third World. The latter focuses on the Soviet Union's use of arms exports as a tool for financing internal economic development and the prospects for Russian arms exports in the post–Cold War world arms market.

The article on the Indian military identifies domestic factors that one would expect are typical of most nations—developing and developed nations alike. Yet it makes clear that the Indian military has often preferred buying hardware from overseas rather than from domestic suppliers, and in some respects the development of India's defense industries resulted from compromises between economic ministers, who wanted to use the defense budget to promote industrialization, and the military, who did not trust the quality or timeliness of domestic producers.

There are two articles which state that up to a certain level at least, military expenditures appear to help rather than hinder the economies of developing nations. Both argue that investors, entrepreneurs, farmers, workers, and agencies need to have some assurance about the security of their homeland. In many developing countries, the vast majority of the defense budget is for personnel who perform state-building and internal pacification duties—functions which may be essential building blocks for economic development.

The section on Africa notes, however, that military conflict and military spending has dramatically exacerbated the economic and agricultural crises that are facing many of the continent's nations. In addition to making the obvious conclusion, that war drives farmers off their lands, the author refers to cereal production numbers to demonstrate that excess military spending distorts free market incentives and tends to reduce acreage under cultivation.

Much of the rest of the book consists of comparative analyses of the relationship between economic development and defense budgets in Thailand, Indonesia, the Republic of Korea, Pakistan, Brazil, and Nigeria. It notes that the existence of a security threat has tended to promote a statist and mercantilist orientation toward economic development, in addition to encouraging larger defense budgets. In some nations, such as Brazil and Nigeria, the perceived threat was internal, caused by the class or ethnic divisions of the 1970s. However, in Korea and Pakistan the threat was external.

As a closing note, several of these articles contain statistical formulae, tables, and technical explanations and analyses that may be difficult for the uninitiated to follow.

JAMES MISKEL
Naval War College

Snow, Donald M. *National Security: Defense Policy for a New International Order.* 3rd ed. New York: St. Martin's Press, 1995. 336pp. (No price given)

Donald Snow's *National Security* is designed as a text for mid-career, officer staff-college students. It is also appropriate as a complementary source for lower division college analytical American government courses. In the latter case, current texts have shifted emphasis to domestic public policy and, in many cases, have omitted any detailed discussion of national strategy planning regarding foreign relations between the United States and the "Second Tier" countries (for which Snow's definition can be found in his first chapter). However, it is the staff-course officer who will benefit most from this book.

This edition is an excellent revision of the author's previous work. He has successfully and concisely updated the status of the international arena as of 1994. He draws one's attention to a realistic taxonomy of the range of divergence between First Tier countries (the United States and the other G-7 nations) and Second Tier nations (the remainder of the 188 recognized nation states). Snow foresees additional states breaking up into more autonomous nation states. However, like most analysts today, Snow has trouble defining the role of China regarding military, economic, and technical placement in his subclassification in the Second Tier.

Snow is well known for his publications on current strategy and policy formation at the highest levels of government. *National Security*'s case studies and examples (as do those in his other books) reflect what has actually happened and why. The author is conversant with the political and military players involved due to his association with the Army and Navy war colleges, where he has served as a faculty member.

Snow's concise reviews of national security processes and brief yet detailed case studies provide the student with material that is not merely descriptive but analytical. The First Tier and Second Tier arrangement is not an intellectual exercise or a substitution for "West versus East" but a serious inquiry into the world's changed relations since 1989. Snow's text stands singularly above most others due to its breadth of concepts: the definition of the international system; the history of military tradition and policy; the process mechanism itself; the history of the Cold War; and the real political and military problems facing the U.S. military and foreign policy makers, who must deal with dwindling budgets and rely on public support.

Part II is an important review, because one is forced to analyze the kinds of problems that Second Tier nations present to the First Tier, especially the United States. Chapter ten raises the current congressional conflict over the command relationships vis-à-vis the United Nations and the United States military in peacekeeping, enforcement, and imposition operations. Snow's ability precisely to describe and separate each operation is another strength of his work.

This book will be an excellent tool for career military officers moving into staff-level policy development. The

author has provided descriptive frameworks for appreciating the mechanics of policy formation, its history through case studies and examples, and conditions that explain the dynamics of its evolving nature.

GARY E. MONELL
San Diego Mesa College

Caldwell, Dan and McKeown, Timothy J., eds. *Diplomacy, Force, and Leadership: Essays in Honor of Alexander L. George.* Boulder, Colo.: Westview, 1993. 322pp. $65

Nearly four hundred years ago, Francis Bacon stated in his *Essayes* that some books "are to be tasted, others to be swallowed, and some few to be chewed and digested." While that early proponent of the scientific method would have approved of the approach that the contributors to this book take, he would probably also agree that this book is not for everyone. Even within the national security community, those who do read it should do so only in part.

This collection of articles is dedicated to Alexander George, a scholar who frequently managed to "bridge the gap between the ivory tower of research and the world of people, power, and politics." The book begins with a short preface on George's impact on political science and ends with a biography of his unclassified publications. The editors and most of its contributors are among George's many former students, collaborators, and admirers in the academic world. They do a commendable job of explaining their theoretical orientation (one that relies on a full explanation of decision processes and leaders' attitudes) and contrasting it with systemic approaches that minimize those considerations in favor of analyses of the dynamics of the state system. The body of the book comprises four parts: "The Beliefs of Publics and Elites," "Leaders and Central Decision-making Groups," "Interest Group and Bureaucratic Politics and Processes," and "Diplomacy and the Use of Force." Each part begins with a short summary followed by three articles relating to some aspect of its title.

Many of the contributing authors—most notably Larry Berman, Charles Hermann, Margaret Hermann, Ole Holsti, Robert Keohane, and Bruce Russett—are renowned within the academic fields of international relations and political science. However, they all share a commitment to the empirical study of international relations and also to theory building, although their approaches vary from the highly quantitative (statistical analysis of survey data), to modelling, to the focused comparison of case studies.

This book covers a wide variety of topics. Holsti demonstrates how American leaders' attitudes toward the Soviet Union changed over time, and Alexander Dallin gives an interesting interpretation of the erosion of Soviet optimism. Margaret and Charles Hermann offer decision-making models in two separate articles, both using decision trees to illustrate their analyses. Two of the twelve articles offer prescriptions for specific approaches to political issues (Herbert Abrams addresses presidential disability and Keohane uses a multilateral approach to

deal with foreign policy). Of more than passing interest to readers of the *Naval War College Review*, Joseph Bouchard, the former commanding officer of the USS *Oldendorf* (DD 972), describes methods of direct and indirect political control of naval operations during four regional crises.

Researchers may find particular articles useful, but few will benefit from a complete reading of this book. It is not for the general reader.

DAN STRUBLE
Annapolis, Maryland

Maas, Peter. *Killer Spy*. New York: Warner Books, 1995. 243pp. $21.95

In this, one of many books about the Aldrich ("Rick") Ames spy case, the author focuses on the lengthy FBI investigation of Ames prior to his arrest in February 1994 on charges of espionage. Maas is no newcomer to nonfiction writing. His earlier works include *The Valachi Papers* and *Serpico*, both noteworthy for their credible detail and authenticity. However, although this book provides some interesting details, it is not of the same caliber.

The FBI's cooperation with Maas is obvious from the many anecdotal and personal details of the investigators, which could have been derived only from interviews. Unfortunately, this has resulted in a work that lacks balance. It portrays the FBI in glowing terms, ignoring or passing over many mistakes made during the investigation leading up to Ames's capture. For example, the investigation actually began in 1985 after several CIA and FBI Russian sources disappeared, but it was not until 1994 that Ames was arrested.

The FBI's painstakingly slow efforts to develop an airtight case against Ames demonstrates how different are the organizational objectives of these agencies. The FBI works toward a conviction, while the CIA concerns itself with identifying spies, determining what has been compromised, and stopping their activity. As Maas points out, these objectives are often in conflict.

It seems that one problem associated with writing about espionage is that there is always a price to pay for the cooperation of the investigating agency. Without "inside" cooperation, an author is left only with information that has already been made public. The price, of course, is that the author must create a good image of the cooperating agency, deserved or not. This is demonstrated in Ronald Kessler's *Moscow Station* and *The Spy in the Russian Club*, and in John Barron's *Breaking the Ring*.

However, with this understood, *Killer Spy* is worth reading because of its accurate portrayal of the difficulties and stringent evidentiary requirements inherent in trying to prove a case of espionage, even after a spy has been identified. In spite of Ames's blatantly excessive spending and his access to sensitive information, it was almost two years before he was arrested. A case was finally opened specifically on Ames in May 1993, but even then the investigation proceeded slowly and methodically.

In Maas's closing paragraphs, he explains the meaning of his title. Because Ames effectively compromised CIA sources to Russia, he was more than a

traitor; he was a killer. Maas puts the betrayal into proper perspective—Ames was personally responsible for the deaths of at least twelve people, probably more. This is an important point that is often overlooked when discussing espionage. It is why this book is a valuable addition to the many written about Aldrich Ames.

E.D. SMITH, JR.
Captain, U.S. Navy, Ret.
Portsmouth, Rhode Island

Bin Sultan, Khaled. *Desert Warrior: A Personal View of the Gulf War by the Joint Forces Commander.* New York: HarperCollins, 1995. 492pp. $35

This is the first book written by a member of the Saudi royal family about the Gulf war. It is largely a descriptive account of the conflict and its coalition forces, containing little real tactical or strategical information on the war.

The author delves into the initial stages of the Iraqi invasion and the desperation of the Saudi government (its forces were unprepared—only eight thousand troops were guarding the northern frontier) as Saddam Hussein's troops threatened the Eastern Provinces of Saudi Arabia.

Khaled offers a well written analysis of the circumstances leading Saddam Hussein to his decision to invade Kuwait, from the Rumaila oil field dispute to threats of unemployment and social unrest arising from the demobilization of Iraq's armed forces after the Iran-Iraq conflict. Only after many failed attempts at diplomacy did King Fahd fully understand that "if Saddam were allowed to get away with the seizure of Kuwait, the independence of Saudi Arabia, and indeed of the whole Arab Gulf, would be threatened." It was then that the King turned to the United States for help.

The author follows with a glorifying history of the Al-Saud family, which includes his own experiences at Sandhurst Military Academy and his rise to head of Saudi Arabia's Air Defenses. What is noteworthy, however, is his description of the development of the Saudi air defense system, his dealings with Raytheon, and a glimpse into the internal command structure of the Saudi forces.

Khaled also attempts to set the record straight on a variety of issues concerning General H. Norman Schwarzkopf's account of the war. One important issue was that Khaled understood early on that "American troops could not serve under Saudi command; equally, Saudi troops—and other Arab forces, for that matter—could not serve under American command. A novel formula was required. The idea of a parallel command was sufficiently flexible to accommodate these difficulties. I was not seeking to compete with Schwarzkopf or downgrade his importance. But I wanted Schwarzkopf to understand that it was necessary to assure Saudi and Arab opinion that we [Saudi Arabia] were exercising control over these Westerners arriving in the heart of Islam. Without such Saudi control, it would have been seen as an invasion by stealth, an occupation by the backdoor, an overturning of our most cherished values. Hence, the need for people to see that I was up there with the American commander in a parallel

command." How coalition forces obtained intelligence from the mass desertion of Iraqi troops and how the threat of Scud missiles was neutralized are also discussed. (To my amazement, Khaled states that when U.S. forces arrived in Saudi Arabia, no Memorandums of Understanding or Status of Forces agreements were in place.)

The last chapters are devoted to the planning and execution of the battle for the town of Al-Khafji and the push to free Kuwait. They offer valuable insight into the positioning and action of coalition forces, supported with a few maps that highlight the general strategy of Operation Desert Storm.

The author was not satisfied with the peace terms dictated at Safwan, which he believes to have been a failure on the part of the coalition forces. He specifically mentions the failure to protect prisoners and Kuwaiti citizens abducted by Iraqi forces. He concludes with ideas about Gulf security and the importance of strengthening the Gulf Cooperation Council.

Scholars of Southwest Asia will find this book a worthwhile addition to their reading list. It offers an interesting view of the Gulf crisis from the Saudi perspective.

YOUSSEF H. ABOUL-ENEIN
Lieutenant (junior grade),
Medical Service Corps,
United States Naval Reserve

Kitfield, James. *Prodigal Soldiers: How the Generation of Officers Born of Vietnam Revolutionized the American Style of War*. New York: Simon & Schuster, 1995. 480pp. $25

In the aftermath of the Persian Gulf War, a number of important monographs have appeared outlining the transition of the American armed forces from the hollow force of the post-Vietnam era to the triumphant one of Desert Storm. No one tells the story more authoritatively than freelance journalist James Kitfield in *Prodigal Soldiers*. Relying extensively on personal memoirs and interviews, the author focuses on the principal commanders of Desert Storm. The result is a highly favorable account of the military officers who weathered the tumultuous decades between the wars.

The central theme of *Prodigal Soldiers* is military effectiveness, which, according to Kitfield, is now founded on a renewed appreciation of joint operations mandated by the Goldwater-Nichols legislation of 1986. Over the next five years, joint and combined operations, coupled with the discriminate use of overwhelming force, produced a revolution in military affairs. At its heart is the concept of "operational art," the intermediate level of war between military strategy and tactics.

What Kitfield does best is to examine the trials and tribulations of the junior and field grade officers who served in Vietnam—during which time they encountered racial tension, insubordination, drug addiction, and public hostility to the armed forces in their quest to rejuvenate the nation's military forces—and how they learned from the military and political mistakes of the war, to produce the joint and combined-arms team that prevailed in 1991.

Graduates of the Naval War College will find the discussions of the Maritime

Strategy and the John Lehman years particularly illuminating. Here the Navy's shining star is obviously Admiral Stanley Arthur, who curbed the service's strong streak of independence to fighting joint warfare, as well as Lehman's uncompromising resistance to reform. Tailhook, incidentally, receives attention only as a backlash to the success the Navy achieved during the Reagan era.

All the armed services, however, receive some recognition from the author. Admirals Turner and "Zap" Zlatoper, Army generals Norman Schwarzkopf, Colin Powell, and Jack Galvin, General Chuck Horner of the Air Force, Marines Walt Boomer and Tom Draude, and a host of others are included. The author views these officers as mavericks who bucked the system and set the armed forces on a course that prepared them for the next war.

Though the author attempts not to be overly biased toward a single service, Kitfield's primary orientation remains the Army, and his personal hero is clearly General Barry McCaffrey, who commanded the 24th Infantry Division (Mechanized) during the Gulf war. The Army's most highly decorated general officer, McCaffrey served multiple tours in Vietnam, taught at West Point, and became actively involved in a number of highly controversial social and military issues, including the full integration of women into the Army's active ranks, the development of the all-volunteer force, and the revision of Army doctrine. Indeed, Kitfield views the very struggle for the Army's soul during the 1970s and 1980s through the lens of McCaffrey's career.

On the debit side, *Prodigal Soldiers* could have used more careful editing. The Naval War College is in Newport, Rhode Island, not Newport News, Virginia. Colin Powell commanded the 1st Battalion, 32nd Infantry Regiment, not the 32nd Division. Moreover, Kitfield's almost exclusive focus on the senior commanders of Desert Storm tends to diminish the achievements of the thousands of officers from all branches of the armed services who served during the interwar period and made equal, though not as highly publicized, contributions. Though not mavericks by the strictest sense of the definition, these officers were part of a larger movement based on the collective pledge never to let another Vietnam occur.

These observations aside, *Prodigal Soldiers* ought to be mandatory reading for all military officers. By studying how the American military reinvented itself from the hollow force of the 1970s into what the author terms the "finest fighting force the world has ever known," current planners can draw parallels to the present day, when the pendulum once again appears to be on the downward turn and the armed forces confront fluctuating enlistment rates and declining defense budgets. The challenge for the current generation, says Kitfield, is to sustain in victory the lessons purchased at such cost in defeat.

COLE C. KINGSEED
Colonel, U.S. Army

Timberg, Robert. *The Nightingale's Song.* New York: Simon & Schuster, 1995. 466pp. $24.95

This tale is difficult to categorize but wonderful to read. It is a biography, history, commentary, and Greek tragedy of the five major players in the Iran-Contra affair. John McCain, the son and grandson of admirals, is a former naval aviator who was shot down over North Vietnam, imprisoned, and tortured. He returned to the U.S. to become a senator from Arizona. Lieutenant Colonel Oliver North, U.S. Marine Corps, who was the pivotal figure in Iran-Contra, demonstrated throughout his flamboyant career the essence of the Naval Academy mantra, "a message to Garcia," accomplishing his assigned missions with determination and flair. Vice Admiral John Poindexter, a quiet, brilliant man who finished first in his Annapolis class and served there as Brigade Commander, emerges as the gifted national security advisor. Bud McFarlane, the introverted foreign policy expert, was Poindexter's predecessor. James Webb, the most decorated combat Marine of his class, served as Secretary of the Navy during a portion of the scandal.

However, this book is no more about Iran-Contra than *Moby Dick* is about whaling. The real themes of this morality tale are the twin towers of ambition and Vietnam and their impact on a generation of Americans. There is also a superbly realized portrait of the Naval Academy of the 1950s and 1960s.

Robert Timberg is a graduate of the Naval Academy, a Marine veteran, and renowned journalist. In summarizing these men, he writes: "Each in his own way stands as a flesh-and-blood repository of [his] generation's anguish and sense of betrayal. Whatever they later became—hero, hot dog, hustler or zealot—they were for a time among the best and brightest this nation had to offer. And in their formative years—at Annapolis and during the Vietnam era—they shared a seemingly unassailable certainty. They believed in America."

Who is the nightingale in the title? Ronald Reagan himself. The story goes that a young nightingale cannot sing until it hears the sweet song of another nightingale. In isolation, the bird would never sing. But when the young bird first hears another, a genetic code is unlocked and it bursts forth in full-throated song. Timberg's conceit is that Reagan provided the first trilling notes and that when the others (especially Oliver North) heard the song, they too began to sing.

This is a big, thoughtful, readable book with much to say about national security.

JAMES STAVRIDIS
Commander, U.S. Navy

Murfett, Malcolm H. *In Jeopardy: The Royal Navy and British Far Eastern Defence Policy, 1945–1951.* New York: Oxford Univ. Press, 1995. 192pp. $38

In the 1945 general election, Clement Attlee led the Labour Party to parliamentary victory with a mission of radically transforming British society through expensive and comprehensive domestic reform. The necessary funding for these programs, coupled with the severely weakened post–World War II economy, mandated a drastic reduction in military and naval force

levels and expenditures, resulting in a "major revision" of British Far East defense policy.

Malcolm H. Murfett, Senior Lecturer of History at the National University of Singapore and author of several monographs on British naval policy in the Far East, analyzes the decisions of the Attlee government and the service chiefs during this period of wrenching disarmament, made more intense by the slow pace of economic recovery and chronic monetary crises. He uses authoritative secondary sources, as well as notes and minutes of numerous Cabinet, working group, service, Ministry of Defence, and parliamentary-committee meetings to build his case. An acknowledged weakness in primary sources is the continued classification of papers under the Public Records Act of 1958, particularly those of the British Defence Co-ordination Committee (Far East) and the Singapore-based Regional Commanders in Chief Committee. What this study illustrates is the potential for conflict and threat to security and economic stability when "a punishing course of disarmament" is undertaken to pay for a "highly expensive domestic reform programme"—a fundamental lesson for post–Cold War governments struggling with domestic versus security spending priorities.

The author characterizes Attlee as a "pragmatic realist" who, with Minister of Defence Albert V. Alexander, essentially espoused a "conservative foreign and defence policy" after 1950. He did so under the pressure of communist insurgency in Malaya and Indochina, the rise of the Peoples' Republic of China (and the attendant threat to Hong Kong and Commonwealth political and economic regional interests), the North Korean invasion of the South, and the advent of the Cold War. Despite the dramatic rise in military expenditures after 1950, with increased funding, pay, and the extension of compulsory National Service to two years, the damage of the preceding four years remained. Murfett describes the pre-1950 British security policy as "in a state of flux." Decisions about the role of Commonwealth forces in regional security, the extent to which British influence in the Far East should be sacrificed (particularly to the United States), the ultimate level of funding, overall fleet strength, and the numbers to be deployed to the Indian Ocean or Pacific, agonized service and political decision makers.

For example, the recommendation of the Harwood Working Party (June 1949) to reduce the Royal Navy to essentially a home defense force and the strident reaction of pro-naval agencies "[illustrate] the enduring problem of matching military needs and economic resources." Base location proved especially thorny, with Singapore ultimately chosen as the central fleet site over Hong Kong or Australia despite senior officer opposition. The reduction of fleet assets by 1950 to roughly 40 percent of late 1945 demonstrates the British dilemma, which was characterized by Alexander as "virtually abandoning our position in the Pacific, seriously weakening our strength in the Mediterranean and Germany, and providing no margin to meet unforeseen circumstances."

STANLEY D.M. CARPENTER
Florida State University

Dunnigan, James F. and Nofi, Albert A. *Victory at Sea: World War II in the Pacific.* New York: William Morrow, 1995. 612pp. $25

The modern publishing phenomenon of the "nonbook book" (e.g., compendia, ephemera, cartoons, etc.) has found its way into the Pacific campaigns of World War II. This is a paper version of a hypertext electronic product that was designed to support a war game. It is nonlinear in approach, and complex elements are simplified and deconstructed into paragraph-sized themes. As such it confronts the reader with some unique attributes that may translate better to the CD-ROM than to the printed word.

Dunnigan is familiar to wargamers as the author of a number of strategic games and related works. Nofi has written several military histories, mostly based on the events of the nineteenth century. The authors collaborated on *Dirty Little Secrets*, *Dirty Little Secrets of World War II*, and *Victory and Deceit*.

Unfortunately, this work suffers from several major flaws, not the least of which is the authors' tone of smug condescension. The reader is treated like a high school student sitting through the football coach's history class . . . listen carefully, take good notes, and don't question the lecture material. There are no footnotes to be found *anywhere* in the text, which significantly degrades the quality of the work, since the authors pontificate frequently on numerous controversial events.

The "Recommended Reading List," while containing some superb choices, consists of only twenty-two works (three of which are by Dunnigan) and refers the reader to the vast *History of the U.S. Army* as well as the equally dense *U.S. Strategic Bombing Survey*. Neither is readily available to amateur wargamers who might use this work as a resource.

This text is broken up into sections in a fashion meant to support wargaming. These include a very brief theater campaign outline, a superficial (and sometimes erroneous) review of the ships, aircraft, armies, tactics, and doctrine of the Pacific War, a *vitae* of selected Pacific leaders (many fairly obscure to modern readers), and a gazetteer listing numerous ports and seas that would have been valuable if the authors had included a set of detailed maps.

There are a number of comparison tables designed to help the wargamer to assess the relative merits of various Allied and Japanese ships, aircraft, and equipment. There are also some force ratios that show how airwings evolved based on the exigencies of combat. Much of the data, in both tables and text, are listed alphabetically—which makes comparisons based on chronology or capability very difficult. Since this is a wargamer's text, there are a number of passages that are ahistorical ("might have beens") and could mislead the novice reader. Again, the lack of attribution reduces much of the utility of this work.

There are two background sections, one titled "The Really Important Stuff: Production and Logistics," and the other "The Boring Stuff: Policy, Politics and Strategy." The latter chapter includes, inter alia, the following topics: naval disarmament treaties, America's concentration camps, and the

Bikini tests (!), as well as a good thumbnail sketch of the intricacies of Imperial Japan and its strategy, culture, and politics. There is also a chapter in this section on "Myths, Conspiracies, and Cover-ups of the Pacific War," which include "Stalin Scuttles Japan's Peace Feelers" ("never established"), "Chiang Kai-shek Seeks a Separate Peace" ("not yet known completely"), "The Doomed Pearl Harbor Survivors" ("in virtually every case, the identities of these men [trapped in sunken hulks] are known but have never been revealed, out of consideration for their families"), and "Japanese Assistance to Subversive Americans" ("never revealed nor acknowledged that it existed").

Also included is a chronology of the Pacific War that is designed to give a detailed, day by day account of events as they happened across the theater. Inasmuch as there is but a single half-page map of the entire Pacific hemisphere, this listing can be frustrating when one is faced with unfamiliar locations or events.

The reader is left with the following impressions: a converted electronic text that was designed to support wargaming, it does contain some interesting, well told tales and unique comparison tables; but it is crippled by a complete lack of attribution, decent maps, any real bibliography, and a condescending, pedagogical style.

This is not a work to cite as a source or read more than once.

WILLIAM R. COOPER
San Diego, California

Berger, Sid. *Breaching Fortress Europe: The Story of U.S. Engineers in Normandy on D-Day*. Dubuque, Iowa: Kendall-Hunt, 1994. 269pp. $19.95

Breaching Fortress Europe tells the story of combat engineers in the D-Day assault on the Normandy beaches. The book was sponsored by the Society of American Military Engineers and written by Sid Berger, himself an engineer and participant in the landings on Utah Beach. The book was written for two reasons: to bring to light the engineers' role on D-Day, which has not been the focus of popular accounts of the assault, and to raise money to maintain the monuments to the American engineers on the Omaha and Utah beaches.

Unlike some recently published accounts of D-Day that rely almost exclusively on oral histories, Berger uses published accounts and individual unit histories to describe the role of the American engineers in the "battle for the first 1,000 yards." This approach has both advantages and disadvantages, compared to oral histories, in that while personal memoirs are often colorful, they are prone to historical inaccuracies.

Hence, although this book may lack interesting anecdotes, it is an authoritative account of a specific but important element of the battle. Provided are detailed and technical descriptions of German defenses, geographic features of the beaches, and American and Allied weapons, which are crucial in enhancing one's understanding of the operation. The book is replete with useful photographs to illustrate further the technical aspects of the narrative. It comes with four pullout maps of Omaha and Utah beaches that are replicas of those

given to engineer combat units prior to the landings. (One of these maps is a copy of that used by Berger during his unit's assault on Utah.)

The first part of the book rehashes the origin of the cross-Channel attack but pays particular attention to the evolution of the engineer forces. The remainder focuses on the operation itself.

In 1943 Adolph Hitler gave the directive to construct an "Atlantic Wall" to prevent Allied landings along the French coast. Expecting an invasion at high tide, Field Marshal Erwin Rommel, commander of the German Army Group B, also constructed obstacles in the tidal zones along the beaches. He erected timber poles tipped with teller mines, fabricated steel structures known as Belgian gates, and hedgehogs to destroy any craft that landed. Allied planners, however, scheduled the invasion for the short interval between low and high tide, therefore exposing Rommel's beach obstacles.

The engineers at Omaha suffered the same problems as their infantry counterparts despite their meticulous planning. Because engineers were among the first units to land, they spent days on the leading landing vessels in the rough waters of the English Channel. They arrived behind schedule and often landed in the wrong place because of strong currents and general confusion, and also they faced stronger resistance than expected from the German forces and suffered high casualties. The engineers were also hampered by infantrymen who could not move forward but instead fought to survive in the tidal area, sometimes using Rommel's timber poles for cover. Of those lanes that the engineers did clear, the marker-buoys were swept away by the current during high tide and were thus rendered useless. However, despite these hurdles, the engineers managed to neutralize the mines, enabling landing craft to off load closer to shore.

On Utah Beach the assault force had a much easier time. First, the beach area was wider, and the combat teams had more time between low and high tide to clear away obstacles. Second, opposition was also lighter, and engineer teams were able to clear wide areas that enabled infantry and armor units to secure the beachhead.

This book includes several useful appendices, sketches of the beach obstacles, lists of participating engineering units, and descriptions and pictures of the monuments to the soldiers that dot the American beaches in France.

ROBERT GOLDBERG
Arlington, Virginia

Bargoni, Franco. *L'impegno navale italiano durante la guerra civile spagnola, 1936–1939.* Rome: Ufficio Storico della Marina Militare, 1992. 503pp. 30,000 lire

Sabatier de Lachadenede, René. *La Marine française et la guerre civile d'-Espagne, 1936–1939.* Vincennes, Fr.: Service historique de la Marine, 1993. 539pp. 130 francs.

These two fine examples of straightforward, descriptive history based on official records depict in full detail the range of roles of navies as instruments of policy in that murky world of international relations between war and peace that was the Spanish Civil War.

Each book is an acute counterpoint to the other, for they represent the stories of states and navies that were arrayed as intense adversaries of each other in the years leading up to World War II.

In the early months of the Spanish conflict, the Italian and French navies cooperated in evacuating thousands of stranded foreigners and endangered Spaniards caught in the crossfire of that unhappy land. Soon, however, the missions of these navies sharply diverged, as their respective political aims clashed.

Benito Mussolini's political ambition drove Italy to intervene with extensive military support for General Francisco Franco's Nationalist Spain, in the hope that political and strategic concessions would weaken France and Britain in the Mediterranean and expand Italian power to fill the Mediterranean and beyond. On behalf of these aims, the Italian navy convoyed troops and supplies to Spain, helped construct and operate naval bases from which to wage war on the Spanish Republic, patrolled the sea lanes to gather intelligence on Spanish and foreign merchant traffic supplying the Republic, engaged in clandestine war by submarines and surface ships against the merchant traffic of the Republic and its Soviet allies, carried out joint and combined offensive operations, operated an advisory and liaison mission with the Nationalist navy, and deceptively participated in international peacekeeping patrols against the very activities the Italian navy was responsible for perpetrating.

The French navy, alarmed by such threatening actions in the strategically vital western Mediterranean, maintained a heavy presence in Spanish seas, and especially wherever Italian warships were in evidence. It engaged in international patrols to curtail arms supply to the warring factions and to defend neutral shipping against "unknown pirate" (Italian) naval forces ravaging the sea lanes of the Mediterranean, and it endeavored to build vital staff and operational relations with the British navy. Britain was the ally necessary to the French policy of deterring the Axis in Europe, and also to the naval strategy of Admiral François Darlan to command the Mediterranean in war as a preliminary to an offensive from the south, in league with eastern allies, into the heartland of the Axis. Were it not for the appeasement policies of the democracies and for Italian naval caution, the two navies might well have openly clashed before the 1939 war.

Both authors derive much of their fascination with the subject from having been eyewitnesses to the events. Each sailed the turbulent seas of the Spanish Civil War, Vice Admiral Sabatier de Lachadenede as a young officer and Dr. Bargoni as a cadet. Bargoni writes almost exclusively on the operational level, while Sabatier de Lachadenede ranges into the political and strategic. Each book is a product of the author's familiarity with the naval archive of his country and was published by his navy's historical office. Unfortunately, neither author has assimilated materials from other nations, depriving these books of valuable context and leading to numerous errors in Sabatier de Lachadenede's study. Sabatier de Lachadenede has nevertheless attained a remarkable achievement, demonstrating skill in writing a fine history through a

thorough examination of the limited existing sources (the French naval archives having been weakened by losses in the course of World War II).

At the end of the Spanish war, the strategic position of each state remained much as it had been before the eruption of Spanish troubles into the international dynamics of Europe. Neither navy learned tactical or operational lessons from the experience. Bargoni, for example, demonstrates the failure of Italian submarine materiel and tactics in the Spanish war, the implications of which were not absorbed. The main lesson to France was strategic and political—whatever success the democracies achieved in forcing Mussolini to back down and the Italian navy to stay its hand came only by confronting Italian rampages at sea with determination and force, with the close collaboration of Britain and France and their naval forces. It is a pity that Britain did not absorb the same lesson.

WILLARD C. FRANK, JR.
Old Dominion University

LaVO, Carl. *Back from the Deep: The Strange Story of the Sister Subs **Squalus** and **Sculpin***. Annapolis, Md.: Naval Institute Press, 1994. 244pp. $27.95

Back from the Deep is a fast-paced, well written story that will appeal to submariners and general readers alike. It traces the intertwined histories of two of the original "fleet boats," USS *Squalus* (SS 192) and USS *Sculpin* (SS 191), beginning with their commissioning within months of each other in the same shipyard. When *Squalus* sank during sea trials, *Sculpin* played a major role in its salvage. Years later, *Sculpin* was sunk by a Japanese destroyer, and *Squalus* (renamed *Sailfish*) sank the aircraft carrier that was transporting *Sculpin*'s survivors to Japan, killing twenty-two.

The author begins the story with descriptions of the types of men who volunteered for submarine duty in the 1930s and what their training was like; he also explains the difficulties suffered by the U.S. submarine force early in World War II, and the cruel treatment of captured Allied soldiers and sailors in Japanese prisoner of war camps. After reading this book, the reader will gain a renewed appreciation for the sacrifices made by these men.

Carl LaVO is a journalist whose work has appeared in the U.S. Naval Institute *Proceedings* and the Institute's *Naval History*. LaVO relies largely on interviews with those who served in both submarines. Readers will experience the thrill of the hunt from a submariner's point of view, tasting the fear of being trapped in a thin, metal tube under hundreds of feet of water, surrounded by depth charge explosions. Although there are the occasional minor technical inaccuracies and nonstandard abbreviations for enlisted ratings, they do not detract from the book. So if one is interested in reading a well written, true adventure story, I recommend *Back from the Deep*. LaVO tells a good story.

However, this work possesses merit beyond its mere entertainment value. Thoughtful readers will reflect on how a single materiel failure caused *Squalus* to sink, and they will gain added appreciation for the backup systems designed into today's

boats. A lack of standard procedures and the absence of a system for collecting and distributing lessons learned contributed significantly to the severity of *Squalus*'s casualty—facts which should be seriously considered by every professional officer. Stories of sacrifices like that of Captain John P. Cromwell—a Medal of Honor recipient who chose to go to the bottom with *Sculpin* rather than risk revealing what he knew, if captured, about the impending invasion of the Gilbert Islands—are always inspiring.

Finally, one gains an understanding of the conditions that have helped to shape the current organizational submarine culture: its strict (some would say rigid) adherence to approved procedure, its occasional difficulty in working with other naval forces (let alone other branches of the armed forces), and its awkwardness in the public spotlight. Even after fifty years, World War II still remains an extremely important influence on submariners. Their dedication to secrecy and independent operations applied just as well to the Cold War as it did in the Second World War. Hence, until recently, U.S. submariners were acculturated to take pride in their separateness and insularity, and to revel in their ability to accomplish important missions completely on their own. However, as times change, different demands are being made on the force, and knowing where it came from can help one to understand where it must go. This book contributes to that understanding.

DAVID HILDEBRANDT
Lieutenant Commander, U.S. Navy

Malia, Martin. *The Soviet Tragedy: A History of Socialism in Russia, 1917–1991*. New York: The Free Press, 1994. 575pp. $24.95

Only with the Soviet Union firmly consigned to history, Martin Malia contends, can its history be viewed with objectivity. While it still existed, the USSR evoked such passionate political views that any treatment of its history or politics often shed more light on the one doing the interpreting than on the subject under review. The reason for this, Malia observes, is that for seventy years the Soviet Union, alone of all states, claimed to be "the sole model of the good society, the gold standard of human affairs, and the perfect polity at the end of history." The fact that this claim was at the same time both widely subscribed to and also the most monstrous lie of the modern age made historical interpretation contentious and short on dispassion. Malia hopes with this present work to provide the requisite objectivity and thereby, it is implied, put to rest quarrels between historians of the Soviet phenomenon.

In this latter goal, Malia unfortunately will fail. His treatment of the Soviet historical record points to one basic, underlying cause for the Soviet crackup. Simply put, the USSR died of socialism, and its demise was inevitable, because the logic of the socialist path chosen by Lenin and the Bolsheviks doomed the Soviet experiment from the beginning. Socialists, naturally, will not like this book. For his part, Malia considers it amazing that socialism as an idea survives the demise of the USSR, and he has little patience for its continuing adherents.

All good historical works are really exercises in interpretation, and this work, clothing its historical treatment in philosophical enquiry, is no exception. Malia argues convincingly, using Soviet history as a case study, that the socialist choice means to deny a people the "ensemble of institutions," especially the market and private property, which are necessary for sustained economic growth but that socialists see as instruments of oppression. Any attempt to dispense with the market, Malia writes, "leads both to economic disaster and political oppression." Suppressing what the people would do naturally means that power must be concentrated and wielded by a few—making the Party a necessary outcome of socialist logic—and producing "the extermination of civil society and the statization of all aspects of life." In other words, Malia fully endorses the thesis put forward by Friedrich Hayek fifty years ago in *The Road to Serfdom*—the socialist choice leads to totalitarianism. The only alternative is to abandon the socialist choice, as many Western socialist parties have done, but which the Bolsheviks and their successors, up to and including Mikhail Gorbachev, never did.

Marrying Hayek's thesis to the accumulated tragedies that constitute Soviet history makes this a profound work. Malia opens with a brilliant discussion of socialist thought, wrestling with varying definitions of the phenomenon, intertwined with an outline history of socialism as a political movement. He explains how Lenin managed against significant odds to impose on Russia his socialist agenda, which became a consistent "genetic code" governing the behavior of his successors, from Stalin through the somewhat clueless Gorbachev. Malia would definitely agree with the assessment of Gorbachev that describes him as "the Soviet leader who destroyed the USSR by accident."

Throughout his survey, Malia lucidly describes how the Soviet economic decline (acute by the 1970s) moved various Soviet leaders to toy with reform. Gorbachev, wrongly viewed in the West as a visionary, strove mightily to save socialism. To overcome opposition in the Party to his reform program, *perestroika*, Gorbachev appealed to the masses and the intelligentsia by instituting *glasnost*, an unprecedented foray into openness. *Glasnost*, however, revealed the totalitarian nature of the system and thereby critically undermined the legitimacy of the Soviet state itself; for its part, *perestroika* could not work, because to introduce market reform meant to destroy the system—a core tenet of which was to suppress the market while centralizing economic life and eventually all aspects of civil society. The final, fatal blow was the revolt of the non-Russian Soviet minorities, particularly Ukraine, the Baltics, and Georgia.

Yet the dissolution of the USSR is just the well known end of the story. Waxing philosophical after reviewing the failure of the great Soviet socialist experiment, Malia warns that "it would be foolish to conclude that because the greatest utopia of our age has ended in disaster, utopian politics as such are finished." As long as there is inequality in the world, Malia notes, there will be movements aimed at eradicating it, and

some of these will seek immense power ostensibly to pursue earthly equality no matter how many people have to be repressed or even killed. Despite the counter-example provided by the Soviet tragedy, the temptation toward absolute power in the name of the people will remain, and that is the real tragedy.

NICHOLAS DUJMOVIC
Sterling, Virginia

Yates, Keith. *Graf Spee's Raiders.* Annapolis, Md.: Naval Institute Press, 1995. 360pp. $32.95

As modern naval strategists rediscover maneuver warfare and protection of commerce as touchstones of naval warfare, Keith Yates's new history of Vice Admiral Graf Maximilian von Spee's remarkable campaign in the opening months of the First World War is most timely. As was "Stonewall" Jackson in his Shenandoah Valley campaign, Spee was outnumbered, yet, living off the land (sea) in a brilliant maneuver campaign, he distressed the enemy far out of proportion to his numbers and weight.

In August 1914 Spee commanded the German Pacific squadron at Tsingtao, with the armored cruisers *Scharnhorst* and *Gneisenau*, and the light cruisers *Emden*, *Nürnberg*, and *Leipzig*. He also had *Königsberg*, in German East Africa, and the light cruisers *Dresden* and *Karlsruhe* in the western Atlantic. Arrayed against them was the Royal Navy's Pacific squadron, strengthened with Australian and New Zealand ships and the Japanese navy. Although the allied forces outnumbered and outgunned Spee, he had the advantage of the vastness of the Pacific, plus the choice of action. Gathering his forces, Spee set out southeastward across the Pacific to destroy "English trade." This he did by raiding ships and shore stations, disrupting vital shipping, and leading the Royal Navy a merry chase.

To further torment allied commerce, Spee dispatched *Emden* on an independent raiding expedition across the Indian Ocean, which succeeded brilliantly. Before *Emden* was surprised off the Cocos Islands and shot to pieces by HMAS *Sydney*, it had sunk eighteen British ships, captured three colliers (in order to fuel itself), and poured gunfire into the harbors at Madras and Penang. In the course of its romp, thirty-eight allied warships were variously devoted to trying to destroy it. That *Emden* could tie up such a portion of the allied navies and that no allied merchant sailor lost his life at its hands occasioned a British newspaper to describe its skipper, Commander Karl von Muller, as "the last gentleman-of-war."

Off Chile, Spee was joined by *Dresden*, which had been pursued from the Atlantic by Rear Admiral Christopher Cradock's small squadron of outmatched British ships. British and German squadrons collided off the Chilean coast on 1 November at Coronel, where Spee handed the Royal Navy its first defeat in a hundred years. Two British armored cruisers were sunk, and Cradock was lost at sea; the remaining British ships fled back to the Falkland Islands. Spee's ships were unharmed.

The British were chagrined and annoyed, for it appeared that Spee's

squadron might round the Horn and do real damage to British shipping in the Atlantic. Winston Churchill and Jackie Fisher pulled *Invincible* and *Inflexible*—two of Fisher's prized heavy battlecruisers—from their watch over the German navy in the North Sea and sent them to the Falklands under Vice Admiral Sir Doveton Sturdee. Both ships had greater guns, greater speed, and thicker armor than Spee's cruisers. When the two forces met off the Falklands on 8 December 1914 the outcome was foreordained: *Schamhorst*, *Gneisenau*, *Nürnberg*, and *Leipzig* were sunk. Vice Admiral Graf Spee was lost with *Schamhorst*, and his sons, lieutenants in *Gneisenau* and *Nürnberg*, were lost with their own ships. The *Dresden* did escape, however, only to run to ground and be destroyed off the Chilean coast not far from the site of the battle of Coronel.

Now only *Königsberg* was left to disturb British shipping between India and Europe. After some success, in October engine troubles had forced it into the Rufiji River delta of German East Africa. There it lay through the winter and into spring, a thorn in the lion's paw. A British squadron blocked the delta and, with aircraft spotting for gunfire by shallow-draft monitors, destroyed *Königsberg* in July 1915.

Beyond the pleasure of a good piece of naval history—Yates's book is uncommonly well done—the author's study of Spee's campaign dramatizes what an outnumbered yet well handled squadron might do.

Keith Yates is a retired professor of chemistry who has previously published in that field. Yet he writes on naval warfare with rare style and insight. His history of this oft-forgotten campaign is well researched, perceptive, gracefully written, and a pleasure to read. The Naval Institute Press is to be congratulated for recognizing Yates's talent and introducing him to the wider naval audience. The book is a gem.

FRANK MAHNCKE
Washington, D.C.

Murfett, Malcolm H., ed. *The First Sea Lords: From Fisher to Mountbatten.* Westport, Conn.: Praeger, 1995. 309pp. $59.95

Taking the 1980 publication *The Chiefs of Naval Operations*, edited by Professor Robert Love of the U.S. Naval Academy, as an innovation and a model, Malcolm Murfett has assembled a survey of the professional heads of the Royal Navy of Great Britain during most of the twentieth century. There is a chapter on every First Sea Lord who served between 1904 and 1959: eighteen in all. Murfett hints that there may be a subsequent volume on more recent First Lords.

The contributors are international: from Britain are Bryan Ranft, Donald Schurman, Eric Grove, Geoffrey Till, and Nicholas Lambert; from America, John Hattendorf; from Australia, James Goldrick and Tom Frame; from Canada, Barry Gough; and Professor Murfett himself, of the National University, Singapore, who, in addition to editing the book, wrote the introduction and three essays. A select bibliography fills a dozen pages at the end, and each chapter concludes with footnotes, citing

mostly primary sources from official and personal papers. The book has been dedicated to the memory of Barry Hunt, the great Canadian naval scholar.

Each essayist critically analyses his subject and reviews either the individual's noted contributions (e.g., John Fisher, David Beatty, Ernle Chatfield, and Louis Mountbatten) or failures—Arthur Knyvett-Wilson, Francis Bridgeman-Bridgeman, Henry Jackson, Frederick L. Field, and Roger Backhouse. (Gough is preparing a new biography of Fisher, but unfortunately no published biography of Chatfield is forthcoming.) There are also interesting related assessments of well known First Lords of the Admiralty, the political heads of the navy: Arthur Balfour, Winston Churchill (twice), Eric Geddes, and later, in an equivalent capacity, Duncan Sandys. Persistent interservice competition and occasional conflict are discussed, especially the process of decline of the Royal Navy as the senior service, superseded by the Royal Air Force.

Memorable episodes recounted in the essays include Beatty and the manipulation of the official historical record of the battle of Jutland and World War I; the "Main Fleet to Singapore" debacle, contributing to the alienation of Australia, among other problems; the role of Sir Roger Keyes as a "loose cannon" and failed First Sea Lord aspirant; the notorious intervention of Sir Dudley Pound ordering convoy PQ-17 to disperse; and Mountbatten's initiatives, which convinced Duncan Sandys to revise his negative assessment of the role of the Royal Navy.

This is not, as claimed, a unique book, however. In 1992 W.G.F. Jackson and Lord Bramall published *The Chiefs: The Story of the United Kingdom Chiefs of Staff*, which highlighted some of the same personalities, and in 1984 David Horner edited *The Commanders*, which was about twentieth-century Australian military leaders. In this very journal, John Gooch wrote an article ("The Chiefs of Staff and the Higher Organization for Defence in Britain, 1904–1984," *Naval War College Review*, January-February 1986, pp. 53–65) documenting the origins and development of the Chiefs of Staff and the role of the First Sea Lords, or lack of it, in matters of planning and intelligence.

In the present work, in his essay on Fisher, Barry Gough ignores the important Churchill-Fisher–Lionel Yexley nexus facilitating reforms and the beginnings of organizing in the lower deck, which was documented in 1981 by Anthony Carew in *The Lower Deck of the Royal Navy, 1900–1939*. Indeed there is no mention of the lower deck until after World War I. Failures there culminated in the Invergordon imbroglio (mutiny?) of 1931. Carew is not cited in that discussion either.

After the debilitating and ridiculous feud between Arthur Marder and Stephen Roskill, the writing of twentieth-century British naval history is progressing and experiencing significant revision. For example, N.A.M. Rodger of the National Maritime Museum is preparing a new, authoritative, multivolume history of the Royal Navy. The volume under review rightly incorporates some of the latest and most important contributions of Jon Sumida, Nicholas

Lambert, G.A.H. Gordon, and Correlli Barnett. This book is recommended as yet another beneficial addition to the literature.

EUGENE L. RASOR
Emory and Henry College
Emory, Virginia

Shulimson, Jack. *The Marine Corps' Search for a Mission, 1880–1898.* Lawrence, Kans.: Univ. Press of Kansas, 1993. 274pp. $35

A major turning point in U.S. Marine Corps history is dissected by Jack Shulimson, a veteran civilian historian at the Marine Corps Historical Center. In this study, which Shulimson originally prepared as a private piece of scholarship, he describes the Marine Corps' switch from supplying armed guards on wooden ships to projecting naval power from steel ships onto foreign shores.

However, to title the work a "search for a mission" is a bit off the mark. As Shulimson shows, the Marine leaders of the day cared most about preserving their status and pushing along their snail-like promotions. They feared, with good reason, that the Corps would be swallowed up by the Army or simply abolished. Such outside events as advancing naval technology and the United States becoming an imperial power forced the Corps to break out of its dead-end status and take the road leading to Guadalcanal, Tarawa, Iwo Jima, and Inchon.

The author peers through his microscope at a small piece of historical time. After the Civil War, the newly industrialized and prosperous nation began expanding its interests abroad. The U.S. quickly needed a modern navy centered on armored battleships that could control the seas, and eventually an expeditionary and amphibious role for its Marines.

In 1880 the Corps had only two thousand men and seventy-five officers, but by 1899 it was authorized six thousand enlisted men and 201 line officers. In those two decades it also stretched to improve its quality, started the School of Application, welcomed graduates from the Naval Academy, began promoting officers by examination, and sent a few officers to the Naval War College, which had been established in 1884 and was becoming "the intellectual core of the New Navy."

It was around the turn of the century that professional standards became slowly but firmly rooted in the Corps' culture. Shulimson traces how the basis of the appointment of officers changed from political influence to "professionalism," even though the changeover would never be absolute. He does not neglect the minuscule for the important, however, detailing the background of each of the fifty-two Annapolis graduates who became Marine officers between 1880 and 1898. Also, his text is backed up by forty-four pages of source notes that give it a fine scholarly patina.

More importantly, Shulimson celebrates the Corps' arrival at their future role: the Spanish-American War provided the need, and new colonial possessions encouraged the United States to look outward. In 1900 the Navy General Board assigned the

Marine Corps the advanced-base mission—to defend and eventually seize advanced bases for the coal-driven, steel Navy.

Before that, certain junior naval officers, and some senior ones, wanted the Marines thrown off their new battleships. The officers regarded these "policemen" aboard their ship as an insult, a relic of the press gangs of the old sailing navy and an impediment to enlisting better sailors.

Shulimson writes, "While some naval progressives worked behind the scenes to remove Marine guard detachments from the new steel Navy, others in the Naval War College explored avenues of naval strategy that would obviously require landing forces, in all probability Marine landing forces." Captain Alfred Thayer Mahan believed that the Marine Corps would be the "backbone of any force landing on the enemy's coast."

During the Spanish-American War, the Marines' landings at Guantanamo and Cavite in 1898 heralded their new purpose, "to seize a base for the fleet." However, the Navy could not take the cities of Santiago or Manila, because it had no force to hold them; the Army was not ready, it had its own agenda. The Navy suddenly realized it had to have men who could establish advanced bases and project its power ashore. Without them, it would be tied to the U.S. mainland; with them, it could leap across the oceans, and the United States could become a world power.

Nothing is ever neat and clean in history. In 1908, President Theodore Roosevelt continued to remove Marines from naval ships anyway. He too wanted them to defend naval bases on foreign shores. However, the Marines were not ready for so swift a change-over. They struggled against and eventually defeated Roosevelt's order.

But Roosevelt was right about the future. Six years later, the Corps had in place the 1st Advanced Base Brigade, and Colonel John Lejeune landed more Marines at Vera Cruz than had been in the entire Corps at the beginning of Shulimson's story. And then on to Belleau Wood.

J. ROBERT MOSKIN
author of
The U.S. Marine Corps Story

Maihafer, Harry J. *Brave Decisions: Moral Courage from the Revolutionary War to Desert Storm.* New York: Brassey's, 1995. 224pp. $23.95

As promised by his provocative title, Harry Maihafer carries us through a series of fifteen vignettes in which an American leader faced a moral crossroads and chose the "harder right" rather than a safer path.

Most of the author's selections of moral supermen are among our nation's storied leaders—Ulysses S. Grant, Robert E. Lee, Thomas "Stonewall" Jackson, John "Black Jack" Pershing, Douglas MacArthur, and Norman Schwarzkopf—which, if anything, is one of the book's flaws. Of course, it is easier to sell books expanding upon the great captains rather than such relatively unknown moral leaders of our country as George Thomas of the Civil War, Earnest Harmon of World War II, or

Julius Becton of the post–Vietnam War era.

Ultimately, uncovering these kinds of decisions (some far from the battlefield) is easier among better known leaders whose lives are well documented. Yet Maihafer does offer the reader a lesser-known subject, Daniel Morgan, who as much as anyone proved early the creed that U.S. Army Rangers "lead the way." It was Morgan who chose to keep his weary force formed-up at the critical battle of Cowpens, which some scholars argue turned the corner of the Revolutionary War.

Indeed this book is slanted toward the Army general on the battlefield. Maihafer is a 1949 West Point graduate and a retired colonel. So it is likely that his work will be read more frequently at Leavenworth than at Annapolis, although themes of moral fiber do transcend the color of one's uniform and focus rather on the strength of a leader's heart and spine. As Omar Bradley reminds us in the introduction, "morally difficult decisions are ten times harder and more important than those involving physical courage."

Not every page takes the reader into harm's way—unless one considers the arrows and barbs of Washington as particularly dangerous. For example, it is captivating to read about the courage of Maxwell Taylor, who turned down the chance to assume chairmanship of the Joint Chiefs of Staff on principle, and the somewhat maligned Alexander Haig, better known for declaring "I'm in charge here" while Secretary of State than for his moral courage as advisor to the National Security Council.

This book is an important effort, easy to read, and useful for the student of military ethics. Too little has been written about the impact upon one's moral character when an unpopular decision has been made. It is a welcome and comprehensive analysis of moral decisions made by moral leaders.

JAMES E. SWARTZ
Pomona, California

McDougall, Walter A. *Let the Sea Make a Noise: A History of the North Pacific from Magellan to MacArthur.* New York: Basic Books, 1993. 793pp. $30

One does not often have the occasion to review for a serious professional journal a work that is, in the author's words, "a long book . . . that tells many stories, and I composed it . . . from memory, on an airplane, sound asleep." It is a book that has the construct "not of a historical novel, but of a novelistic history written, though it be serious nonfiction, in a spirit of magic." *Let the Seam Make a Noise* is a delightful and unusual book about the history of the North Pacific from the time of Magellan to the near-present. But lest the sober-minded reader be prematurely put off, it is also a serious, perhaps profound, work.

Its underlying artifice is that the author falls asleep flying over the Pacific, while trying unsuccessfully to start writing this very book on his laptop. In a literary device borrowed from the *Aeneid*, he is "summoned" in his

"dream" by the spirits of several historical personae who were major participants in historical developments in the North Pacific. These include Hawaiian Queen Kaahumana, Spain's Father Junipero Serra, Abraham Lincoln's Secretary of State William Seward, the great Russian statesman and builder of the Trans-Siberian Railroad Count Witte, and Japan's 1930s-era Ambassador Saito. They all demand that the author, as a Scholar, tell them what has happened "since they passed from time."

The resulting account is an epic history with the sweep and feel of the best work of a Michener or James Clavell. It is "a narrative of 400 years of exciting voyages of discovery, pioneering feats, engineering marvels, political plots and business chicanery, racial clashes and brutal wars." Beginning when vast parts of the North American and Northeast Asian littorals were virtually empty, Japan was sealed off from the rest of the world by its own choice, and China was submerged in centuries of chaos and foreign exploitation, the author examines the migrations of peoples, the interactions of civilizations and empires, the evolution of internal and external politics and trade, the impact of technology, and the eternal verities of geostrategy, through the present day.

The author begins by setting the scene in each of the nations that will play major roles in the North Pacific. He then traces the early Spanish voyages of discovery and laggardly movement up the North American coast, the Russian expansions eastward toward the Far East and Alaska and southward into Manchuria, Japan's centripetal development, the Manchu decay, Hawaii's evolution from isolated island group to object of geopolitical envy, and, of course, the boundless American continental expansion. He goes on to discuss the trans-Pacific conflicts that have characterized this century and set the scene for much of today's security environment. The role of technology, particularly in transportation, as a key driver of the political, economic, and cultural interactions among the Pacific nations is a recurring theme. Frequent, lively anecdotes and sketches of colorful protagonists enliven and complement the whole.

The narrative is interrupted every few chapters when the "Scholar" and the "spirits" engage in, shall we say, spirited arguments. Using this technique, the author presents other nations' viewpoints concerning various events and controversies, through the mouths of his historical personae. It also allows him to debate effectively many controversial and difficult issues, such as the role of race in geopolitics, the sometimes unsavory policies and actions of the United States (and others), the costs and benefits of imperialism (the Hawaiian spirit has much to say about this), the role of immigration, and the moral and political decline of today's America. The author's arguments are cogent and refreshingly free of the taint of "political correctness" currently fashionable in U.S. academia.

Let the Sea Make a Noise is far more than popular history, however. Amidst the endless fascinating characters and events, there is shrewd geopolitical analysis throughout, which should interest any reader concerned with the

future Pacific security environment. The author argues that since the "Age of Steam and Rails" of the mid-nineteenth century, the United States, Japan, and Russia have been entrapped by the geostrategic logic of the "North Pacific triangle," in which "to secure Siberia, Russia needed Manchuria; to secure itself, Japan needed Korea, Manchuria, and control of the western Pacific; to secure its West Coast, the U.S. needed Alaska and Hawaii; to secure them it needed the western Pacific, and so on. The once empty North Pacific was a volatile mix within a container that technology was making less roomy." Today, a dynamic China, accelerating technological change, and explosive East Asian growth add even more elements to an exceedingly complex security matrix. The unfolding of events in the North Pacific will be more portentous for the United States than ever before and will demand corresponding attention from American policymakers.

Walter McDougall is professor of history at the University of Pennsylvania. His previous work, *The Heavens and the Earth: A Political History of the Space Age*, won the 1986 Pulitzer Prize in history. *Let the Sea Make a Noise* is surely an odds-on favorite for another.

JAN VAN TOL
Commander, U.S. Navy

Morrison, John; Gardiner, Robert; and Greenhill, Basil, eds. *The Age of the Galley: Mediterranean Oared Vessels since Pre-classical Times*. London: Conway Maritime Press, 1995. 256pp. £28

The magnificent, and less studied, oared vessels that dominated the Mediterranean Sea for much of the history of classical human civilization are the focus of the tenth volume in Conway's impressive (to date) History of the Ship series. Apart from John Morrison, who is the chief editor of this volume, it includes contributions from fifteen of the best known writers of naval history of the era of the galley. As Robert Gardiner notes in his preface, many of these writers are the only ones actively conducting research in their particular areas of expertise and interest. As a consequence, Morrison has been forced to exercise great care in his editorial judgment. His introduction is a masterpiece of collation and provides a great deal of information on the material presented in all the chapters. About the only criticism that can be made concerns his decision to incorporate his comments on the various contributions in the introduction itself. If they had been placed at the head of each essay, the reader would have been spared the need to refer continually to the introduction.

Like the other volumes in this series, this title is divided into two distinct sections. The first of these focuses on the history of the galley, while the second examines the technological evolution and design considerations of this type of vessel. Like its counterparts, it is heavily illustrated with many contemporary drawings and artwork, illustrations, and maps. In particular, the illustrations are detailed and useful. Some chapters include photographs of the reconstructed Greek trireme *Olympias*, which are a great help to those unfamiliar with the technology of that

period. There are also photographs of modern archeological excavation sites. Unfortunately, though unavoidably, given the incomplete, and one could say sketchy, data available, the editor has wisely chosen to forgo the traditional data tables of contemporary ships. All the articles are heavily footnoted, and they are further complemented by Morrison's excellent bibliography and Gardiner's helpful glossary.

One of the most striking aspects of this volume is the detailed and occasionally complicated nature of the data presented. In fact, in order for galleys to be effective ships, their designers had to assimilate a great deal of knowledge about oar mechanics. This goes far beyond merely calculating the best average speed obtainable by any given design; it includes an understanding of human endurance, as well as the optimal placement and best length of each oar. It should come as no surprise to readers that sails were employed as the principal motive force, oars being used when there was no wind, or for final maneuvering in a naval confrontation. As has happened throughout the history of ship construction, each new galley type seems to have become increasingly larger and more complicated. Thus, simple one-tiered ships gave way to two and three-tiered vessels, and some builders even experimented with galleys with more than four levels of oarsmen!

The depth of historical information on these ships and how they influenced the rise and fall of the various naval powers is outstanding. Most of the contributors shed much light on the evolution of naval tactics, the methods employed to man these ships in times of war and peace, and the steps taken to preserve ships when they were not needed. Information is provided for all known types of galleys, whether built for military or commercial purposes. There is also a lively, if somewhat speculative, discussion of the appearance and construction of Muslim and Byzantine galleys. As of yet, the Byzantine *dromons* have never been found, but allowing for the lack of physical evidence, this volume still manages to present a convincing portrait of this type of vessel.

All in all, this is an excellent addition to the series. It would be a welcome addition to any ship enthusiast's library, and it should be consulted by anyone with an interest in early ships and the history of this region. It is proof positive that Conway Maritime Press intends to make each volume in the series as authoritative as possible.

PETER K. MISPELKAMP
Pointe Claire, Qc.
Canada

Recent Books

Callegari, Dennis. *Cook's Cannon and Anchor: The Recovery and Conservation of Relics from HMB Endeavour.* Kenthurst, New South Wales: Kangaroo Press, 1994. 96pp. $29.95

This short, well illustrated volume tells the story of how Captain James Cook ran aground on Endeavour Reef in June 1770 and how, two hundred years later, the Australian Defence Force's Maritime Research Laboratory recovered and preserved for posterity the anchors and cannon that Cook lost overboard.

The authors provide a clearly written and fascinating narrative that documents the historical background, recovery, conservation, and ultimate deposit of the recovered anchors and cannon in various museums. This is a valuable case study. Through it, other navies and naval leaders can easily and profitably learn about the range and complexity of the field of historical preservation, something that is rapidly beginning to demand more official attention and money.

Cook, Haruko Taya and Cook, Theodore F. *Japan at War: An Oral History.* New York: The New Press, 1992. 479pp. $27.50

The Cooks have produced a one-of-a-kind masterpiece that chronicles Japan's wars from 1937 to 1945, based on experiences of Japanese soldiers, sailors, and private citizens. The extent of those interviewed is impressive—from war criminals (an engineer who directed work on the bridge over the River Kwai and a scientist who used live prisoners to test biological agents) to family members of suicide pilots and human torpedoes, from high level policy makers to everyday people. Political decisions and military strategy are examined, and the Cooks offer insight into Japanese society and mass psychology at work. Rationales for such decisions as Japan's simultaneous wars with China, Britain, and the U.S. are discussed, as well as the unflagging intensity of Japanese spirit until the bitter end.

The Cooks' scholarship provides a well rounded, meticulous collection of accounts that deliver history with social and psychological insight. The interviews are focused and avoid drift into anecdotal rambling. *Japan at War* is must reading for those who want to understand Japan during the Second World War and gain an appreciation for present-day Japan. Military historians and those interested in Japan and Asia are in debt to the authors for mining this treasure before Japan's war generation passes away.

Giles, Donald T., ed. *Captive of the Rising Sun: The POW Memoirs of Rear Admiral Donald T. Giles*. Annapolis, Md.: Naval Institute Press, 1994. 232pp. $27.95

Commander Donald Giles, a 1921 graduate of the United States Naval Academy, reported for duty as vice governor of Guam on 8 May 1941. Within hours after the Japanese attack on Pearl Harbor (seven months after the commander's arrival) Giles would become one of the first American prisoners of war in the Pacific and would remain so for the duration of the war.

Giles's memoirs were discovered after his death by his son, who has thoroughly researched American and Japanese records to ensure historical accuracy. Offering an eyewitness account of noble resistance to the Japanese, Giles also discusses his experiences in the camps at Zentsuji and Roku Roshi.

This historical contribution is an inspirational record of the struggles that faced the prisoners of war in the Pacific.

Ψ

The Naval War College Review is listed in Ulrich's International Periodicals Directory, Military Media Database, and in Free Magazines for Libraries; it is microformed by University Microfilms International (UMI) of Ann Arbor, Michigan; and it is indexed in the Air University Index to Military Periodicals, in Historical Abstracts and America: History and Life (both ABC-CLIO), the International Bibliography of Periodical Literature, the International Bibliography of Book Reviews, and selectively in the American Foreign Policy Index and INFO-SOUTH. A bound 1948–1991 index of all Review feature articles is available from the editorial office; it is updated annually in the Winter issue. Our reviews (beginning with Spring 1994) are indexed in Book Review Index (Gale Research, Inc.). A bound index of book reviews since 1948 is in preparation.

The Naval War College Press is listed in the Gale Research, Inc., Publisher's Directory. A catalog of Naval War College Press offerings is available by request to the editorial office.

From the managing editor . . .

Writing for the *Naval War College Review*

Quite a few readers returned their Spring 1995 subscription renewal forms having checked-off "I am interested in writing for *NWCR*." This seems a good time to explain for all readers what we tell individuals who approach us on the subject.

What gets an article into the *Review* is its subject and the thought applied to it, as reflected in the clarity of thesis, evidence, and argument.• We look for a combination of value to our "target audience" (policy makers and commanders), informativeness to our general readership, and scholarly presentation. Given all that, we will work with authors on the rest.

Our primary interest, maritime security, embraces a wide range of subjects: operations and strategy, naval doctrine and planning, war gaming, technology, international law, coalition warfare, operations other than war, regional studies, civil (including media) relations, history, and defense economics. We do not generally publish in the areas of tactics, procedures, social or personnel issues, or on bureaucratic matters not bearing plainly upon the above.

See our inside front cover for submission details. Our articles run a minimum of about 3,500 words exclusive of apparatus (most articles require documentation); the majority are in the 5,000 to 9,000–word range. The "Set and Drift" department accommodates shorter works; longer ones may lend themselves to our "Newport Papers" series. As for graphics, we print tables, diagrams, maps—usually redrawn by our illustrators—and (very occasionally) black-and-white photographs. Prospective book reviewers should contact our book review editor.

All material must be unclassified and suitable for unrestricted distribution; the responsibility for any necessary clearances lies with authors.

The ball's now in your court. If you would like to discuss a project, by all means get in touch.

• *As to how to achieve these qualities, see Teresa Pelton Johnson, "Writing for* ***International Security,*** *" in the Fall 1991 issue of that excellent quarterly.*